

September 1988 \$2.95

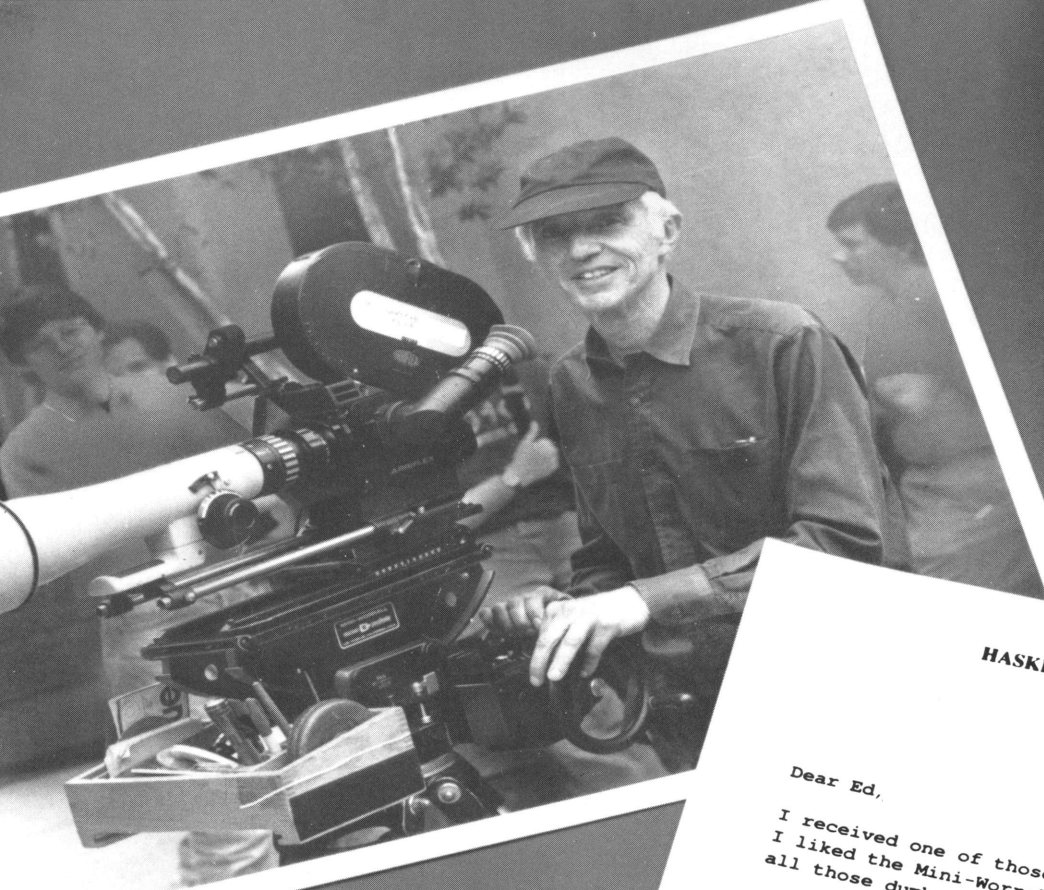
Canada \$3.50

American **Cinematographer**

Alien Nation—a Sci-Fi Cop Show



*The Bat—Restoration of a Silent Classic
No. 5 Rides Again for Short Circuit 2*



HASKELL WEXLER

Dear Ed,

I received one of those survey letters asking if I liked the Mini-Worrall. I don't want to answer all those dumb questions.

You know I like the Mini-Worrall a lot. You also know I'm picky and I appreciate the changes you made from the early model.

My Mini-Worrall has been through wars in Nicaragua, damp coal mines, desert sand and ocean spray. It was even dropped off a pickup truck and she still moves as smooth as goose grease.

My assistants, male and female, appreciate setting up with minimal strain and grunt. We all like the tilt plate, quick-release system, and those beautiful flat black handwheels.

You've got a great head, Ed!

Regards,

Haskell
Haskell

**Mini-Worrall from Cinema Products.
Great Gear for Great Filmmakers.**

cinema E products
CORPORATION

Technology in the Service of Creativity

3241 South La Cienega Blvd., Los Angeles, California 90046-3112
Telephone: (213) 836-7991 • FAX (213) 278-4958 • Telex: 6831828

GENERAL[®] CAMERA

540 W 36th Street
New York, NY 10018
(212) 594-8700
Telex 265899

Panavision[®]
Cameras and Lenses

Chapman
Dollies and Cranes

Complete Production Services

Cameras
Lenses
Lighting
Grip Equipment
Sound
Dollies and Cranes
Location Vehicles
Generators

Video
TV Studios

Secrets of the ViPs

They Face Reality

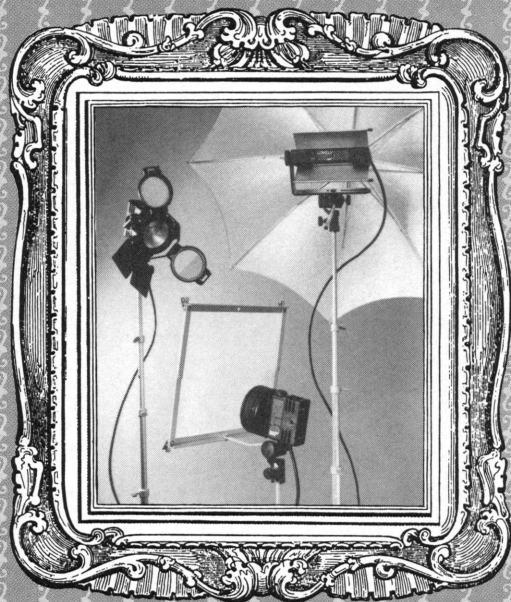
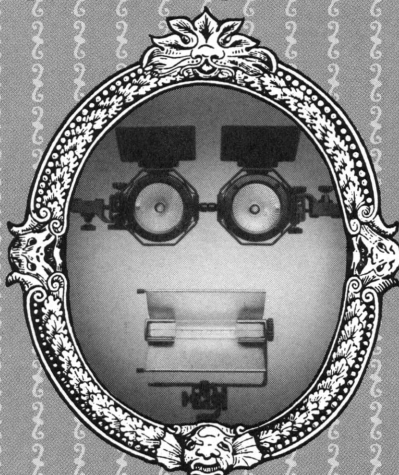
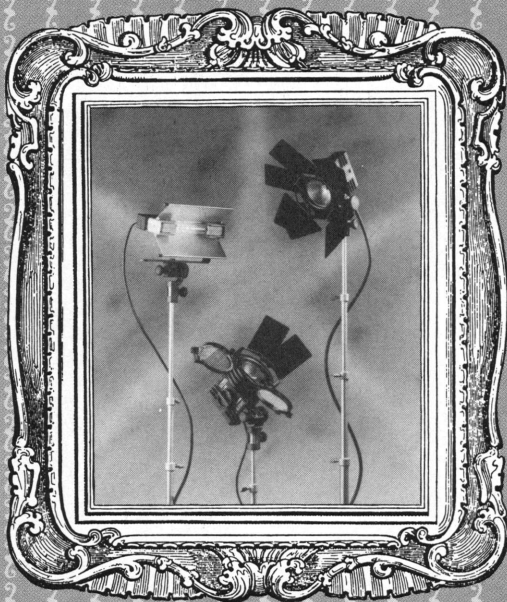
ViP high-output, low-wattage lights exploit today's fast films, lenses, video cameras, and multiple power sources. They make high-quality, low-budget shoots a reality.

They Inspire Talent

Our little V, i, and Pro-lights each have special talents. Broad, even illumination; flattering fill that can make available light viable; dramatic spot/flood lighting.

They Act Friendly

ViP lights are such good friends, they share their light controls, mounts, and brilliant lighting plans. This distinguished little trio is also uncommonly user-friendly.



They Make Connections

Because ViPs are well-connected, they switch from stands, to clamps, to cameras, to ceiling grids, to doors and walls. At your fingertips.

They Get Around

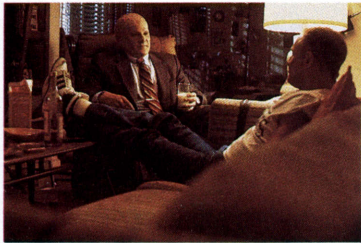
Lowel's little ViP Sophisti-kit is one of seven clever ways to travel with the best—prepared for the worst.

Lowel ViP System—the secrets of success, brought to light.

Lowel-Light Manufacturing, Inc., 475 Tenth Avenue, New York, NY 10018-1197. 212-947-0950.

Features

- 30 **Markab!—Ship of Souls**
Camera probes ancient Egyptian secrets
- 34 **A Gathering of Bats**
Restoring lost films no easy task
- 44 **Alien Nation—Buddy Film With a Twist**
Space race demands unique photographic style
- 49 **Designing an Alien Nation**
Neighborhood created for 'newcomers'
- 58 **Married to the Mob—a Struggle to Escape**
New York, Miami location shooting
- 64 **From Outer Space, They Live**
Subliminal seduction of earth through media
- 72 **Robot Foils Robbers in Short Circuit 2**
Joys of photographing mechanical star
- 78 **Robotrix for Short Circuit 2**
What makes Johnny Five Run
- 89 **Computer Revolution for Sound**
Editing refined through new technology



44



64

Departments

- 10 **Letters**
- 12 **The Bookshelf**
- 18 **What's New**
- 93 **VideoGram**
- 95 **Classified Ads**
- 99 **Ad Index**
- 100 **In Memoriam**



On Our Cover:
"Newcomer" from
outer space, a rep-
resentative charac-
ter of *Alien Nation*
(Photo by Jane
O'Neal)

Contributing Authors
Nora Lee
Scott MacQueen
Linda Lynton
Ron Magid

Dave Knox



CINEMATOGRAPHY • STEADICAM

212-288-1603 ☎ 914-276-3079

American
Cinematographer

George Turner
Editor

Martha Winterhalter
Art Director

Jean Turner
Associate Editor

David Heuring
Editorial Assistant

Patricia Armacost
Circulation Director

Barbara Prevedel
Accounting

Angie Gollmann
Advertising Sales Director

Margaret Gentleman
Classified Advertising

George L. George
Book Reviews

Mike Maginot
Videotape Reviews

Publications Advisory Committee

Victor J. Kemper, *Chairman*
Don Birnkrant, *Co-Chairman*
Linwood Dunn
Philip Lathrop

American Cinematographer (ISSN 0002-7928) established 1920 in 68th year of publication is published monthly in Hollywood by © ASC Holding Corp., 1782 N. Orange Dr., Hollywood, California 90028, (213) 876-5080, U.S.A. Subscriptions: U.S. \$22.00; Canada/Mexico \$27.00; all other foreign countries \$32.00 a year (remit international Money Order or other exchange payable in U.S.). Advertising: rate card on request to Hollywood Office. Copyright 1986 ASC Holding Corp. Second-class postage paid at Los Angeles, California and at additional mailing offices. (All rights reserved.) **Postmaster:** send address change to ASC Holding Corp., P.O. Box 2230, Hollywood, CA 90078.

TIME IS MONEY!



When
you're involved in a production,
the last thing you can waste is **TIME**.
Because time is **MONEY**.

The Nevada Motion Picture Division spends
time saving you money. 24 hours a day,
7 days a week, 365 days a year . . . and that
amounts to a lot of time.

24-Hour Service in a 24-Hour State

NEVADA

IN A SUPPORTING ROLE

Nevada Motion Picture and Television Division



Bob Hirsch, Director
McCarran International Airport
Las Vegas, Nevada 89158
8:00 am-5:00 pm: (702) 486-7150
After hours: (702) 791-0839
Carson City office now open for
Northern Nevada and rural county
service. Call Robin Holabird
(702) 885-4325

HMI's from LTM

A Daylight-Fill Experience.

THERE'S REALLY NOTHING QUITE LIKE THEM.

LTM's attention to the smallest of details guarantees performance you can depend on, shoot after shoot. And no matter what you're shooting, only LTM's exceptional selection of HMI's, from Fresnels and Cinepars to Softarcs and Fiberoptic Multistrands gives you the flexibility to choose just the right lights for every set-up.

With a coast to coast network of Sales and Rental Service Centers throughout the U.S. and Canada, product availability and expert technical assistance are just a phone call away.

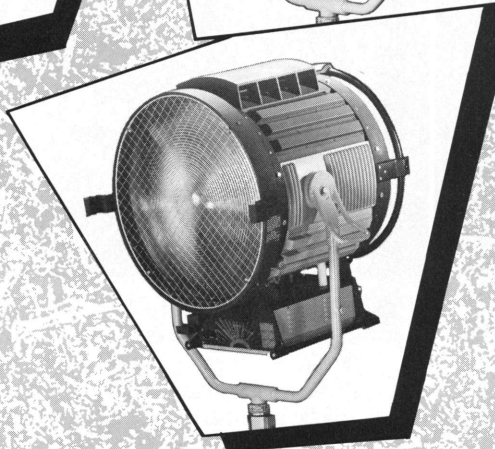
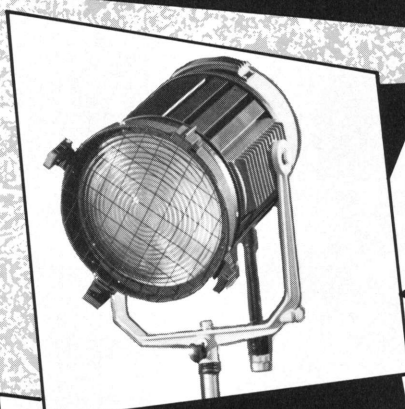
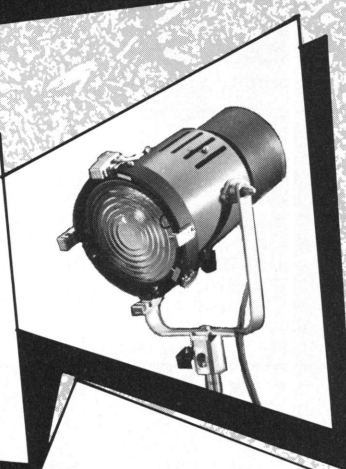
We love our lights! So will you...



CALIFORNIA • NEW YORK • FLORIDA • ILLINOIS
MICHIGAN • ONTARIO

LTM CORPORATION OF AMERICA
NATIONAL HEADQUARTERS AND
WESTERN REGIONAL OFFICE:
11646 Pendleton St., Sun Valley, California 91352 •
(818) 767-1313 • FAX (818) 717-1442
NORTHEASTERN REGIONAL OFFICE:
New York • (212) 243-9288
SOUTHEASTERN REGIONAL OFFICES:
Miami • (305) 620-5224
Orlando • (407) 859-0409
MIDWESTERN REGIONAL OFFICES:
Wood Dale (Chicago) • (312) 595-0470
Livonia (Detroit) • (313) 464-1103

LTM CORPORATION OF CANADA
Mississauga (Toronto), Ontario • (416) 672-5464



SUPER-SCREEN (THE BREECH-LOADER)

FASTEST LOADING/UNLOADING WINDSCREEN SYSTEM MADE IN THE WORLD



- ✓ Super Quiet
- ✓ Super Light
- ✓ Super Strong

SUPER-SCREEN FEATURES:

- PURE POLAR PATTERN
- ENHANCED MID-RANGE (DIALOGUE)
- NO db LOSS IN MID-RANGE
- REDUCED SIBILANCE/RUMBLE
- HIGH WIND NOISE ATTENUATION 25+ db WITH SCREEN ALONE
- SUPER SLIMLINE PROFILE
- 4 PIN, 4 POS. BAYONET LOCK
- EXTREMELY LOW SOUND BOUNCE
- CONTOURED HI WIND COVER
- UNAFFECTED BY RAIN AND SNOW
- CABLE EXIT AT SHOCKMOUNT

SUPER-MOUNT FEATURES:

- QUIETEST & ORIGINAL ISOLATOR DESIGN
- UPPER AND LOWER TWIN VEE WAY JAWS SLIP INTO WINDSCREEN BREECH & LOCK
- VARIABLE SOFT TO HARD SUSPENSION
- MODULAR DESIGN — INTERCHANGEABLE ISOLATOR CRADLES
- USE PISTOL GRIP OR FISHPOLE YOKE

LIGHT WAVE SYSTEMS

7760 BURNET AVE., VAN NUYS, CA 91405 U.S.A.
PH. 818/780-3002 TELEX 690092 LIGHT WAVE UD
Dealer Inquiries Welcome



American Society of Cinematographers

The American Society of Cinematographers is not a labor union or a guild, but is an educational, cultural and professional organization. Membership is by invitation to those who are actively engaged as Directors of Photography and have demonstrated outstanding ability. Not all cinematographers can place the initials ASC after their names. ASC membership has become one of the highest honors that can be bestowed upon a professional cinematographer, a mark of prestige and distinction.

Officers

Harry Wolf
President
Leonard South
Vice President
Charles Wheeler
Vice President
Victor J. Kemper
Vice President
Joseph Westheimer
Treasurer
Alfred Keller
Secretary
Jack Cooperman
Sergeant-At-Arms
David Fleming
Legal Counsel

Members of the Board

Howard Anderson, Jr.
Joseph Biroc
Jack Cooperman
Stanley Cortez
Linwood Dunn
William Fraker
Victor J. Kemper
Philip Lathrop
Michael Margulies
Richard L. Rawlings
Lester Shorr
Leonard South
Ted Voigtlander
Joseph Westheimer
Harry Wolf

Alternates

Richard Glouner
Alfred Keller
Richard Kelley
Woody Omens
Charles Wheeler

Museum Curator

Kemp Niver



MAKE IT POP
WITH UNILUX LIGHTING

You wouldn't get a shot like this with ordinary lighting. All you'd get is a blur.

But Unilux strobe lighting captures the cork, freezes the foam, and makes every frame of your film crystal clear. For 25 years Unilux has made shooting the sparkle easy—with equipment that interfaces with most camera systems, and comes with its own Unilux operator to assure a

worry-free shoot and optimum effects. With Unilux lighting, you know you'll get results worth celebrating.

For technical information and pricing, call toll-free: 1-800-6FLASH3.



UNILUX, INC.
QUALITY THROUGH LIGHTING

Hackensack, NJ USA 201/489-0800 Available in New York, California, Toronto, London and Tokyo.
Photography courtesy of: RAWL SCHULZ & CO (USA) INC.

THE GREAT AMERICAN MARKET...
NOW IN

FULL COLOR

GamColor deep-dyed polyester—fresh, clean color that lasts longer from The Great American Market. Manufactured by a unique patented process to insure clarity, strength and consistency.

NEW — GamColor CineFilters.

The same durability, uniform performance and sparkle, now in correction colors.

- Six pure Booster Blues
- Extended range of CTOs
- True Neutral Densities, including .15

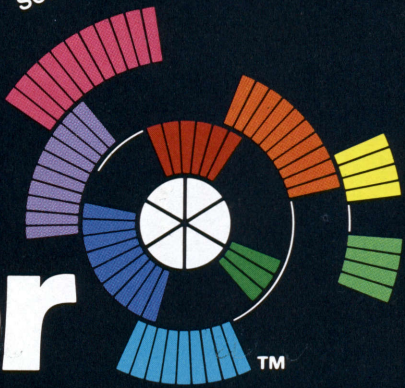
CineFilters are rated for color temperature shift and total transmission percentage. They are easy to use, easy to remember, guaranteed pure and consistent.

Call The Great American Market for your GamColor swatchbooks and the name of a GamColor dealer near you.

Try GamColor—colors that count, service you can count on.



GamColor



Deep dyed polyester color filters

THE GREAT AMERICAN MARKET

826 N. COLE AVENUE HOLLYWOOD CA 90038
213/461-0200 • TWX 910 494 1233 • FAX 213/461-4308

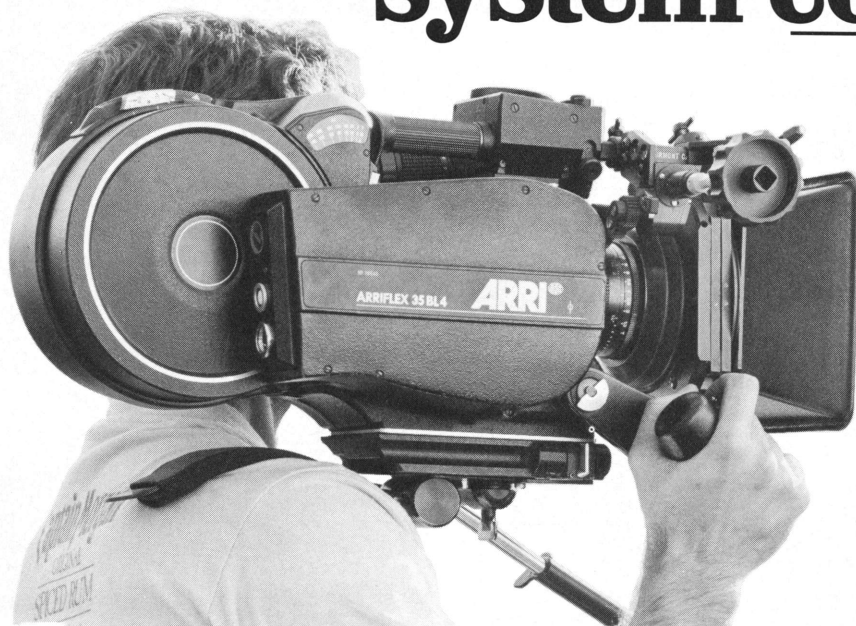
GamColor is made in U.S.A.



Three more examples
of the things we make because
you asked for them

The Shoulder Rest
works with our 35BLs and
Type 3s. The Matte
Box and Follow Focus both
work with our BLs,
our 35-3s and our 35-2Cs.

Hand-Holding: How Clairmont makes the system complete



Two things about our accessories: (1) We round out the hand-holding package; (2) Suggestions from camera crew people are built in.

Getting the 35-3 balanced on your shoulder

For the 35-3, ARRI makes the 400 foot shoulder magazine and the handheld eyepiece door. The door puts the eyepiece up and forward, to get the weight back and down. The magazine helps to balance the camera in three ways: it's rear-mounted, low-profile and co-axial.

Our adjustable Shoulder Rest:

It weighs 2lb. 2oz. There's a ball socket that lets you adjust the padded piece up, down, sideways or to any shoulder-slope angle. Another ball socket makes the handle angle adjustable every which way. The handle extends from 8 to 12 inches.

Our Matte Box:

The rod fits into the 35-3's carrying handle. With the BL, it fits into a socket on the body. A lever lets you quickly align the unit with the lens. Hard mattes snap onto the sunshade. You can use any prime lens from 16mm to 180mm. Weight: 2 lb. exactly.

Hand-holding with effects filters

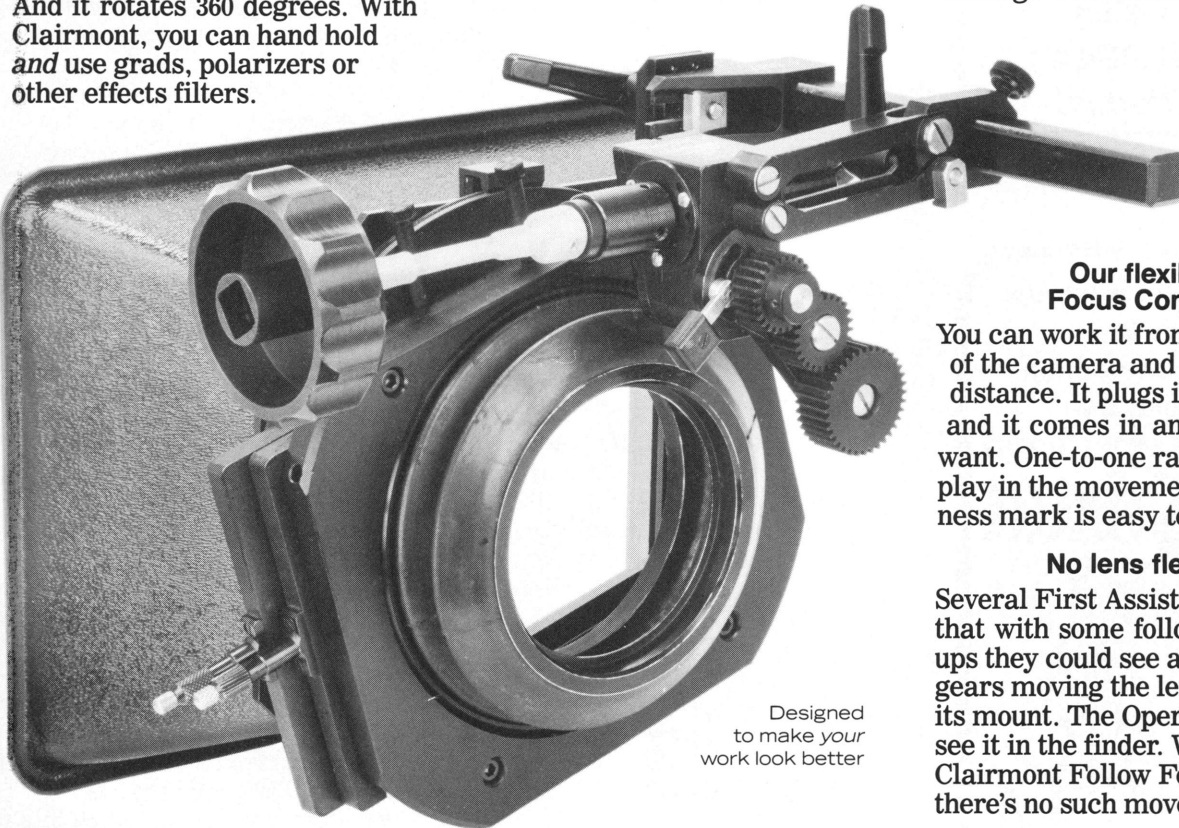
The filter stage accepts two rectangular filters, 4×4 or 4×5.65. And it rotates 360 degrees. With Clairmont, you can hand hold *and* use grads, polarizers or other effects filters.

**Our Handheld Matte Box
has two 360 degree rotating filter
stages. And you can change
lenses without having to remove the
Handheld Follow Focus rig.**

Changing and setting lens is also fast and easy

That same single lever lets you instantly swing the F.F. gears away

from the lens — so you can quickly and easily change lenses without removing the Follow Focus assembly. With or without the gears in place, it's easy to get at the lens and easy to see the settings. Fast to work with.



Designed
to make *your*
work look better

Our flexible Focus Control:

You can work it from left or right of the camera and from any distance. It plugs into either side and it comes in any length you want. One-to-one ratio; and no play in the movement. Your witness mark is easy to see.

No lens flexing

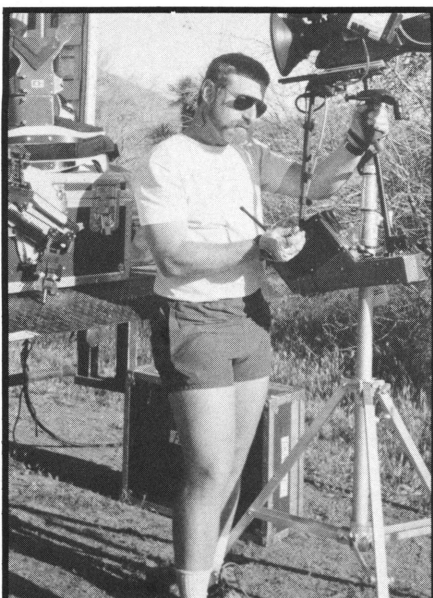
Several First Assistants told us that with some follow-focus setups they could see and feel the gears moving the lens slightly in its mount. The Operator could see it in the finder. With the Clairmont Follow Focus, they say, there's no such movement.

Our Follow Focus: fits any lens, fast

It mounts on the Handheld Matte Box rod. Using one lever, you can quickly mate its adjustable gears with any of our prime lenses—our modified Canons and Cookes, our Nikons, our PL and B mount Zeisses. The Follow Focus works with any of our 35mm Arriflex cameras, including the 2C. Weight: 7½ oz.

CLAIRMONT CAMERA

4040 Vineland, Studio City, California 91604 • (818) 761-4440
238 East 1st St, N. Vancouver, B.C. V7L 1B3 • (604) 984-4563



STEDICAM
OWNER/OPERATOR
Rusty Geller
805-498-8844
(So. California)



**Get a leg up
on the
competition
with the
FAST TRIPOD
SUPERSTIX**

- Aluminum construction
- Swiss-made precision
- Weatherproof
- Lightweight
- Ball level
- Rising column
- Carry handle
- Shoulder strap
- Velcro tie-ups



SuperStix (Legs only) \$699.
SuperStix w/Miller Pro 106 .. \$1625.
SuperStix w/O'Connor 30 ... \$1995.
SuperStix w/O'Connor 50 ... \$2895.
SuperStix w/Sachtler 7+7 .. \$2995.

**IMAGE DEVICES
INTERNATIONAL**

MIAMI ATLANTA

1825 NE 149 Street 3311 Empire Blvd.
P.O. Box 61-0606 P.O. Box 82835
Miami FL 33181 Atlanta GA 30354
PHONE 305 / 945-1111 PHONE 404 / 766-1111

IDI ships anywhere in the world

Letters

In addition

The proper credit for the cover and article heading "Occident Trotting - a Strange Title," March 1988 American Cinematographer: Eadweard Muybridge (England, 1830-1904) Occident Trotting, Plate 32 from The Attitudes of Animals in Motion: A Series of Photographs Illustrating the Consecutive Positions Assumed by Animals in Performing Various Movements; Executed at Palo Alto, California in 1878 and 1879. Trial proofs on print-out paper. Stanford University Museum of Art 13932 Muybridge Collection.

Credit for the text:

Eadweard Muybridge (England, 1830-1904) Back view of Electroshutter, plate B; Front view of Electroshutter, with positions before, during and after exposure, plate C; Plates from The Attitudes of Animals in Motion: A Series of Photographs Illustrating the Consecutive Positions Assumed by Animals in Performing Various Movements; Executed at Palo Alto, California in 1878 and 1879. Trial proofs on print-out paper. Stanford University Museum of Art 13932 Muybridge Collection.

—Lorenz Eitner
Stanford University
Palo Alto, Calif.

Close, But No Cigar

In "Theatrical Cinematography Noted by ASC, Academy" (Feb. 1988 American Cinematographer) Michael Ballhaus describes Philippe Rousselot as the second Frenchman to earn an Oscar nomination for cinematography.

Didn't Louis Malle win an Oscar for cinematography in 1956 for *The Silent World* which he also co-directed with Jacques Yves Cousteau?

—Rick Vahan
Miami, FL

Cousteau won an Oscar for the documentary, The Silent World, as the producer. Cinematography was not part of the award. —ED

Offensive Term

The term letterbox is offensive and foolish and should be banished from the magazine. Letterboxes are about 20" x 40"

and present an aspect ratio of about 0.5:1, which is not that of any film I have ever seen. Anyway, we don't just need to have the sides of high ratio pictures extended a little and post-post-production movies eliminated from video presentations of theatrical films, we need to see all four edges of the frame as originally intended...top, bottom and sides...regardless of the aspect ratio, and including Academy.

We also need better image quality on cassettes of older films, especially those in the public domain. Present audiences often see only a very inferior reflection of the film as it actually exists.

The letters ASC attached to a name in the credits has always meant that quality images reflecting the current state of the art could be expected. Perhaps it is now time for the Society to consider extending its endorsement to video transfers that meet its standards. The ASC logo somewhere on a cassette sleeve and in the promotional materials will help me to believe that I am actually going to buy a reasonable approximation of the film, not a cropped remnant with degraded images.

E.T. The Extra-Terrestrial is to be released on cassette this autumn in both full-frame and cropped editions. This is important since Spielberg films are photographed to look OK when cropped-for-TV. Even so, he finds the full frame very desirable.

Now about all those other great films....

—William W. Hartney
Elmwood Park, Illinois

Technical Bloop

Yep, we know you can't ride a Louma crane! Yet, we made a mistake on Page 42 of American Cinematographer for August, 1988. The vehicle being ridden by crew members is a Titan, even though, as the story says, most of the ballroom scenes were photographed via the Louma.

—Ed.

American Cinematographer welcomes letters. Send them to: Letters, American Cinematographer, P.O. Box 2230, Hollywood, CA 90078. Please include your name and address. Letters may be edited for length and clarity.

NEW HIGH TEMPERATURE RANGE FROM LEE FILTERS



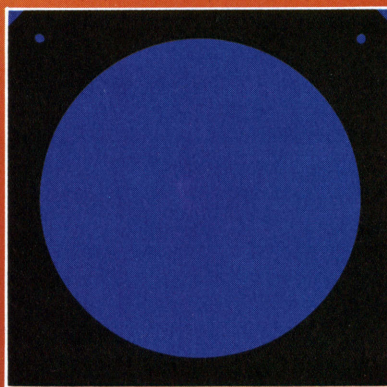
The most durable filter available.

This revolutionary new filter is manufactured using a new type of Polycarbonate which until now has never before been available. It can take temperatures generated by today's high powered lamps in its stride. Temperatures that are high enough to ignite a safety match in front of the lens, will leave this filter totally intact.

We call it the HT range. A filter that in our extensive tests outlasted every other filter on the market, (and we mean every other filter).

Its high heat resistance makes it ideally suited for prolonged use and situations where lamps are difficult to reach.

It all adds up to total reliability under the most testing conditions.



This is the H.T. filter tested at 285°C for 3 hours on a 30° elipsoidal lamp.

Whatever you need from a high temperature filter, Lee can provide the answer with HT – the hottest new filter on the market.

It's available in the following sizes, 0.56M x 0.53M sheets or 4M x 1.17M rolls, so you don't have to buy more than you need, and it conforms to BS3944.

The range of colours carries the same colour consistency guarantee as our Polyester filters.

Peacock Blue (HT 115) –
Medium Blue-Green (HT116) – Light
Blue (HT118) – Dark Blue (HT119) –
Deep Blue (HT120) – Lee Green
(HT121) – Fern Green (HT122) –
Dark Green (HT124) – Medium Blue
(HT132) – Primary Green (HT139)
Bright Blue (HT141) – Congo Blue
(HT181) – Zenith Blue (HT195) –
Alice Blue (HT197) – Hamburg Frost
(HT254) – Medium Yellow (HT010)
– Deep Straw (HT015) – Fire
(HT019) – Medium Amber (HT020)
– Dark Amber (HT022) – Bright Red
(HT026) – Medium Red (HT027) –
Dark Magenta (HT046) – Just Blue
(HT079) – Lavender (HT058).

**See us at SMPTE
BOOTH 1242**

LEE Filters



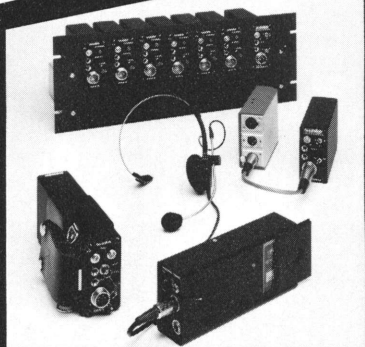
A Lee Panavision International Company

Lee Colortran Inc. West Coast: 1015 Chestnut Street, Burbank, CA91506. Tel: 818/843-1200. Fax: 818/954-8520

East Coast: 23 East 22nd Street, New York, NY 10010 Tel: 212/995-9200. Fax: 212/995-9289

Lee Filters Ltd. Central Way, Walworth Industrial Estate, Andover, Hampshire. SP10 5AN. Tel: (0264) 66245 Fax: 55058 Telex: 477259.

NEW FROM
Swintek



Full Duplex Wireless HEADSET INTERCOMS

Features

- Integrated Duplex Antenna, No Rat Tails!
- Any Frequency between 72 and 260 mHz
- Multi channel full duplex configurations available featuring 20 channel capability

the **WORLD'S SMALLEST**
pro video camera
Wireless Microphone Systems

When you're
really serious...



Complete MARK QDC-50A-S system including receiver, lavalier transmitter and microphone... **\$1488.00**

Manufactured in the United States in all metal cases. Demo units available on request.

Swintek

587 DIVISION STREET/CAMPBELL, CA 95008
(408) 378-8091 / TELEX 4970334 SWINTEK SUVL
FAX # 408 378 6980

The Bookshelf

by George L. George

Recapping 80 years of motion picture progress, **The New York Times Encyclopedia of Film**, an impressive 13-volume set, carries in photographic reproduction over 5500 articles published between 1896 and 1979 in the pages of that authoritative daily. Knowledgeably edited by Gene Brown, it reports the industrial, economic, social, political and cultural issues that marked the worldwide course of cinema. Its journalistic rather than didactic style imparts a topical flavor to events and personalities of the movies' historic past. Further volumes will update the set. (Garland, NYC, \$2000/set; for a limited time, \$995/set).

A sumptuous coffee-table book, whose illustrations, charts, diagrams and text match its imposing physical aspect, Joel W. Finler's **The Hollywood Story** explores the American movies' historic development. Industry facts and figures, personalities and techniques are sweepingly marshalled in this engrossing volume. (Crown, NYC, \$35).

Ethan Mordden, in **The Hollywood Studios**, takes an informed and entertaining look at the distinctive film styles of the major companies. He identifies the specific mixture of production facilities, executives, available stars and story preferences that characterize the product of each studio, and portrays perceptively the individuals who influence that balance. (Knopf, NYC, \$24.95).

A history of the motion picture, intended primarily for students but deserving wide readership, **Light and Shadows** (3rd ed.) by Thomas W. Bohn and Richard L. Stromgren combines an attractive style with an informative description of cinema's international progress. (Mayfield, Mountain View, CA, \$24.95).

Kim Holston, in **Starlet**, singles out 54 among the scores of pretty girls who sought fame and fortune in Hollywood, including those who quickly faded into marriage or oblivion (Joan O'Brien, Anne Held) and those like Jane Fonda and Raquel

Welch who made the grade. (McFarland, Jefferson, NC, \$39.95).

Updating their earlier probe of a once flourishing field, Jack Nachbar et al. compile in **Western Films 2** an annotated bibliography of publications issued between 1974 and 1986. This expertly researched and well organized work covers films, filmmakers and performers, as well as broader aspects of the genre. (Garland, NYC, \$40).

Growth and development of the detective character from novel into film is watchfully charted in Jon Tusk's **In Mansions and Alleys**. From Sherlock Holmes to Philip Marlowe, we follow their evolution through interviews with the authors in Tusk's wide ranging and extensively documented study. (Greenwood, Westport, CT, \$49.95).

An album of over 100 striking photographs by Claudio Edinger, **The Making of Ironweed** transposes into book form director Hector Bibenco's visualization of William Kennedy's somber novel and screenplay. The film's mood of haunting anxiety is mirrored in Edinger's starkly lit pictures, enhanced by significant excerpts of the dialogue. (Penguin, NYC, \$14.95).

The making of *Matewan*, John Sayles' gripping film chronicling the 1920 coal miners' strike in West Virginia, is described by its director in **Thinking in Pictures**. His account provides a clear understanding of every technical step in film production, and illuminates the creative process that inspires the movie maker. (Houghton Mifflin, NYC, \$21.95/9.95).

French multimedia virtuoso Jean Cocteau displays his talents in Arthur King Peters' alluring album, **Jean Cocteau and His World**. Writer, filmmaker, painter, choreographer, Cocteau is represented in this superbly illustrated volume with photographs of his life and art, and an insightfully descriptive text. (Vendome, NYC, \$40).

In a collection of essays pervasively called **Diary of an Unknown**, Jean Cocteau records his thoughts on a



SYNC 1/4 INCH AUDIO-TO-VIDEO

Negative-To-Video Transfers of Dailies with Sound

- Eliminate Cost of Workprint and Mag
- Optimize Audio Quality
- Create CMX-Compatible Audio Edit List

The 1/4" original can be mono with Neopilot sync
or stereo with FM-pilot or SMPTE Time Code

For more information, call:
Sound Dept. Manager Allan Gus,
Video Dept. Manager Tim Spitzer or
Sales Reps. Linda Young or Libby Moyer



Send for our
new brochure

1/4 INCH AUDIO-TO-VIDEO SYNCING

Du Art Film Labs · 245 West 55th Street · New York, NY 10019 · (212)757-4580 · Telex: 640-253 · FAX: (212)333-7647
Du Art Boston/New England · 650 Beacon Street, 2nd Floor · Boston, MA 02215 · (617)267-8717

JIM MURO
STEADICAM
212-679-6936

FLYING TIGER
COMMUNICATIONS INC.
COLT LTD.
(212) 929-1156



MOTION PICTURE
AND VIDEO
SPECIALISTS

LOCATIONS • AERIALS • WESCAM
GYRO-STABILIZED VEHICLE MOUNT
• CONTINENTAL HELICOPTER MOUNTS
• STEADICAM



UNDER BUDGET.

CMX 3/4" video editing \$17.00 per hour at BHI.

CMX Edge controller. A/B roll off line. Decision list management capabilities. Pyxis dual time base corrector. Waveform Monitor. Vectorscope. And more. All for \$17.00 an hour. And if you need to shoot under budget, try our 16mm, Super 16 and Betacam packages. From just \$150 per day.

Call BHI at 718-729-3232 and be overwhelmed by just how under budget you can be.



BLACK &
HISPANIC
IMAGES, INC.

number of matters from filmmaking to the Holy Trinity. Witty or profound, these intimate speculations reveal a finely tuned intellect under a sensitive poet's mask. (Paragon, NYC, \$17.95).

A study of Japanese New Wave films of the 60s, David Desser's **Eros Plus Massacre** examines their favorite themes of youth, identity, sexuality and women, and their relationship to the cultural/political rebellion of the period. (Indiana U. Press, Bloomington, \$40/12.95).

German films of the 20s are seen, in Jo Leslie Collier's **From Wagner to Murnau**, as embodying the esthetics of realism and expressionism, while such F.W. Murnau movies as *Sunrise* and *Tabu* exemplify the transposition of romanticism from stage to the screen. (UMI, Ann Arbor, MI, \$44.95).

In **A Cinema of Loneliness**, a penetrating study of the "new Hollywood," Robert Phillip Kolker argues convincingly that Altman, Coppola, Scorsese and other directors, who initiated this renaissance of film form and content, reflect in their work a keen perception of the conflicts and uncertainties of our society. (Oxford U. Press, NYC, \$16.95).

The key relationships and interconnections between cinema and 11 other communication arts are explored in a resource guide edited by Gary R. Edgerton, **Film and the Arts in Symbiosis**. It examines systematically the impact of film on painting, photography, music and the theatre, and spotlights modes of their symbiotic pairing with the motion picture. (Greenwood, Westport, CT, \$55).

Thea von Harbou's futuristic novel **Metropolis**, on which Fritz Lang's 1926 film is based, is a literary curio whose naive theme of capital-labor rapprochement was dressed up in Lang's grandiose architectural design and movement choreography. (Donning, Norfolk, VA, \$12.95).

In **John Wayne: Prophet of the American Way of Life**, Emanuel Levy ponders the mythical trappings of Wayne's film *oeuvre* and finds a clue in his tight control over his public image. (Scarecrow, Metuchen, NJ, \$39.50).

Black entertainer Bill Robinson, who tapdanced his way from vaudeville to Shirley Temple films, is profiled in **Mr. Bojangles**, a vivid biography by Jim Haskins and N.R. Mitgang. (Morrow, NYC, \$18.95).



OpTex complete 1000 Lens Conversions



We look forward to
seeing you at our
SMPTE booth No. 1835

IN 1975 OpTex opened up new creative possibilities for cinematographers with our matched series of telephoto lenses: the world-renowned OpTex Canon conversions. OpTex have now completed over 1000 conversions.

Specialist wildlife and sports cinematographers take our lenses on demanding assignments in all parts of the world, proving them time after time with reels of award-winning footage. For special scenes in features, commercials, and documentaries, the OpTex Canon conversions provide pin-sharp close-ups and superb image quality.

OpTex carefully re-build and re-mount each lens with the OpTex Universal mounting system – which, with appropriate OpTex lens mounts, permits the use of these telephotos on most 16/35mm film & 2/3" ENG cameras!

The full range comprises: **135mm f2;** **200mm f2.8;** **300mm f2.8;** **400mm f2.8;** **500mm f4.5;** **600mm f4.5;** **800mm f5.6;** **150-600mm f5.6** manual & motorised zooms. Also, to complement the **K-35** Series; **10mm f2.8;** **14mm f2.8;** **20mm f2.8;** **50mm f3.5** macro.

The **K-35** series and the new 16mm format **C 8x7** 7-56mm T2.1 zoom lens are also available from OpTex. OpTex are appointed Canon Technical Representatives.

OpTex-converted Canon lenses are available for rental in the US from:
General Camera Corp., 540 West 36th. Street, New York, NY 10018, USA.
Tel: 212 594 8700.

General Camera West, 940 North Orange Drive, Hollywood, California 90038, USA. Tel: 213 464 3800.

Cine Video Tech Miami, 7330 NE 4 Court, Miami, Florida 33138, USA.
Tel: 305 754 2611.

Cine Video Inc., 948 North Cahuenga Boulevard, Hollywood, California 90038, USA. Tel: 213 464 6200.

Otto Nemenz International, 870 North Vine Street, Hollywood, California 90038, USA. Tel: 213 469 2774.

Roessel Cine Photo Tech., 48-20 70th. Street, Woodside, New York 11377, USA. Tel: 718 424 1600.

Victor Duncan Inc., 6305 North O'Connor Bldg., Irving, Texas 75039, USA.
Tel: 214 869 0200.

Victor Duncan Inc., 1575 Northside Drive, NW, Suite 355, Atlanta, Georgia 30318, USA. Tel: 404 355 3001.

OpTex

OpTex, 22-26 Victoria Road, New Barnet, Herts EN4 9PF, UK.
Tel: 01-441 2199 (24-hr answering). Telex: 8955869 OpTex G. Fax: 01-449 3646.

WORLD PREMIÈRE
DAYLIGHT STRAIGHT FROM
THE SOCKET



COMPLETELY INTEGRATED
SQUAREWAVE ELECTRONICS
WITHOUT SEPARATE BALLAST
ABSOLUTELY FLICKERFREE
AT ALL FILMING SPEEDS
THE FINAL STEP IN DAYLIGHT
TECHNOLOGY

VISIT US AT

SMPTE October
Convention 15th - 18th
booth 1741

NewYork 88



October
5th - 11th
hall 14.1
aisle C
booth 21

CONTACT

**FGV Panther Corporation of
America**
Rental and Sales of Cinematographic Equipment
3360 Adina Dr., Los Angeles, CA 90068
Phone (213) 850-0246
Telefax (213) 876-2968

FGV Panther GmbH
Rotbuchenstr. 1, 8000 Munich 90
West Germany
Phone (089) 699 0441
Telex 5216945 fgvd
Telefax (089) 699 0466



FGV HELIOS®

SCHULTZ DESIGN



New Rules for ASC Television Awards

In preparation for the ASC Third Annual Awards for Outstanding Cinematography, which will be presented on March 5, 1989, the American Society of Cinematographers is instituting a new process for entries in the two television categories.

This year, an entry form will be the vehicle for consideration, accompanied by a cassette tape (no film) of the program to be considered. The cinematographer of credit on a series episode or on a miniseries or special is allowed to submit an entry in both categories, but his entry tape must include at least 15 minutes of the program-

ming. The tape can be VHS, Beta or 3/4".

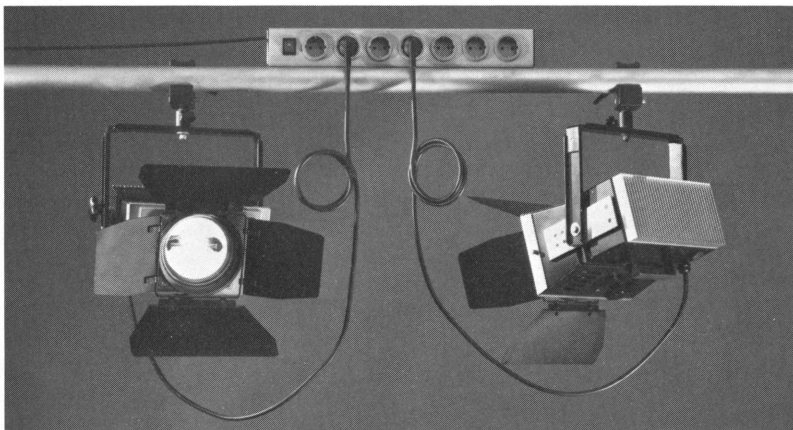
The awards year includes any show aired for the first time in the United States between July 1, 1987 and June 30, 1988. Deadline for entries to be received at the offices of the Society is December 15, 1988.

Theatrical motion pictures will be judged under the same rules as previous years, that is: any feature shown in a Los Angeles theater between the dates of January 1, 1988 and December 31, 1988 is eligible for consideration. No entry application is necessary.

"In order to emphasize fairness in the judging of the works we review, we

believe an application for consideration of a particular program by the cinematographer who photographed it is important," says Michael Margulies, ASC, chairman of the awards committee. "This method assures the entrant that we will have seen his show, at least in part, thus making the selection process more equitable."

Applications for entry for television are available by mail from the ASC Awards Committee, P.O. Box 2230, Hollywood, CA 90078. Interested applicants should send a self-addressed stamped envelope in order to receive the application blank and entry rules. △



Daylight HMIs

New to the world of cinematic lighting are Helios daylight HMI lights, 100% flickerfree at all filming speeds, head and ballast integrated into one lightweight unit.

Under the trademark Helios, FGV Panther GmbH is distributing daylight balance HMI spots for film, video, theater and television. Halogen metal-vapour lamps ordinarily need unwieldy ballasts. Conventional HMI lights also require an exact correlation between standard low frequency of discharge and camera frame rate. Simply put, if speeds don't match in the proper

ratio, the lights flicker and destroy the shot.

With the new Helios HMI lights an extremely small and lightweight ballast has been easily integrated into the head itself. The Helios head plus ballast combination as such weighs no more than a conventional head alone. Cable runs are simplified and lighting stages can be planned for lighter, smaller loads with less equipment standing about. With the ballast and, therefore, the head feeder cable eliminated, arranging and/or altering lights has become more effortless and faster.

The electronic ballast enables the light to operate at a discharge frequency much higher than any other HMI light previ-

ously or currently available. Helios spots have such a high discharge rate that they are 100% flickerfree at all frame rates. Continuous varying of frame rate with daylight balance lighting has finally become possible.

Helios spots also automatically select line voltage – they may be connected to either 110 V or 220 V lines without adjustment or trouble. This function is sophisticated enough to actually balance out deviations in line current and frequency of both aggregates and mains.

For more information: FGV Panther, 3360 Adina Drive, Los Angeles, CA 90068. (213) 850-0246.

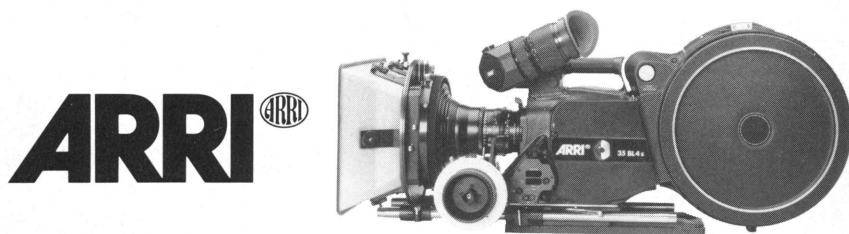


Wide-Angle Lens

A new Cooke wide-angle 14-70mm Varotal lens for 35mm film work is now available as a production item, it has

5 Years in a Row,
and 10 times since its introduction in 1972,
cameramen winning the
Oscar[®] for Best Achievement in Cinematography
have chosen the Arriflex 35BL
to photograph their Award-winning films.

FILMED WITH ARRIFLEX CAMERAS



Make Movie Magic

Used Bolex

EBM w/16-100mm POE-4	\$2495.00
SBM w/16-100mm POE-4	1995.00
400' magazine	295.00
Torque motor	250.00
Unimotor w/AC adapter	195.00
MST motor only	250.00
Electric handgrip f/EBM	450.00

Used Bell & Howell

Eyemo motor DC (As Is)	\$95.00
Rewind crank	10.00
Birns & Sawyer 150mm objective	25.00
Birns & Sawyer 100mm objective	20.00
Birns & Sawyer 20mm objective	15.00
Angenieux 15mm objective f/B & H	25.00

Used Canon

Battery holder f/DS-8	\$10.00
2100 close-up lens (72mm)	25.00
Remote switch f/Scoopic	15.00
Battery box f/Scoopic	25.00
Magazine adapter f/Scoopic	350.00

Used C.P.

C.P. 400' magazine	\$295.00
Mitchell 400 magazine	195.00
C.P. case holds 3)400' C.P. mags	95.00

Used Eclair

NPR AC sync motor 24 fps	\$395.00
ACL w/400' mag., 12-120mm Angenieux, 24 fps motor	4995.00
ACL w/400' mag., 12-120mm Angenieux, variable speed motor	5495.00
ACL 200' mag.	295.00
ACL 400' mag.	595.00
NPR 400' mag.	750.00
NPR w/400' mag., 12-120mm Angenieux, crystal control motor	5995.00

Used Editing

Kodak Pageant 250-S 16mm proj.	\$595.00
Kodak Pageant 250-A Arc Proj w/power supply	995.00
Viewlex M-16A 16mm proj.	450.00
Bauer P-6 Synchron 16mm proj.	1295.00
Moviola 1 gang 16mm synchronizer	125.00
Hollywood 1 gang Super 8 synchronizer ..	110.00
Hollywood 2 gang 16mm synchronizer ...	195.00
Hollywood 3 gang 16mm synchronizer ...	275.00
Ediquip 4 gang 16mm synchronizer	350.00
Ediquip 6 gang 16mm synchronizer	495.00
Hollywood 4 gang 35mm synchronizer ...	350.00
Precision magnetic sound reader	135.00
Moviola amp/speaker 1 input	99.00
Ediquip rewind w/1 reel shaft	40.00
Ediquip rewind w/brake w/1 reel shaft	45.00
Moviola swivel base	19.00
Ediquip titewind, elbow type w/core plug ..	75.00
Ediquip mag. sound reader 35mm	195.00
Laumic 2 channel amp/speaker	125.00

We stock Scotch, Maxell,
Memorex & TDK audio tape.

Call for quantity pricing.

*Shipping not included. Used equipment
is sold subject to your approval and prior
sale.*

**We accept MasterCard, Visa &
Discover card!**

800/33-HELIX

HELIX®

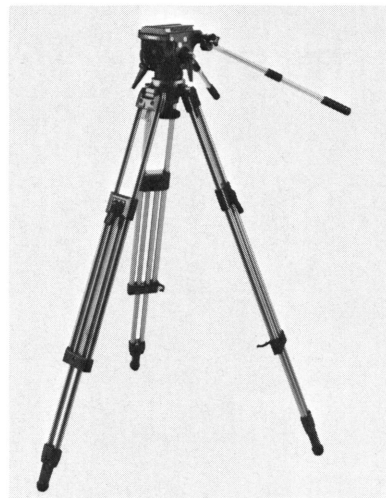
**310 South Racine Avenue
Chicago, Illinois 60607
312/421-6000**

been announced by Rank Precision Industries, Inc.

Produced by Rank Taylor Hobson Limited, this new lens offers greater studio flexibility, particularly in tight corners. At the same time, performance quality is equivalent to that of the 20-100mm Cooke Varotal. The new Cooke wide-angle lens has a 76° horizontal angle field of view and, according to the company, is the first true wide angle 5:1 zoom lens. It enables cinematographers to exploit more camera angles than ever before.

In addition, the new lens's optics give high light transmission, faithful color rendition, minimal flare and excellent durability. A sealed front protects the lens from environmental interference, and a built-in isolator minimizes camera noise projection.

For more information: Rank Precision Industries, 411 East Jarvis Avenue, Des Plaines, IL 60018.



Bogen Cine/Video Tripod

Bogen Photo Corp. has just added an outstanding new tripod to its line of cine/video support systems. The Bogen tripod features tandem legs with retractable, spring-loaded spike tips, a 100mm diameter claw-ball leveler, variable leg angles within a 180 degree arc with 2 click stop positions, quick-flip lever leg locks, stainless steel fittings with high-quality enameled castings and built-in leg straps for convenient transport.

While lightweight – just 11 lbs. without head – this rock-solid tripod will handle cameras up to 22 lbs. when used with the Bogen 3066 cine video fluid head and even more with other heads. It measures a compact 32 in. and extends to 54½

in. without head.

For more information: Bogen Photo Corp., 17-20 Willow Street, P.O. Box 712, Fair Lawn, N.J. 07410.



Shooting Vibration Free

The Mystic Seaport Museum on the southern coast of Connecticut is a 17-acre coastal New England village. It features historic homes and buildings, a working shipyard, exhibit galleries, a planetarium, woodworking craftsmen, maritime demonstrations, and more than 300 historic vessels. "It's probably the largest seafaring museum in the world," says Ken Mahler, manager of the film and video archive.

Mahler's job is to preserve the history of the sea and make clips of notable or famous nautical events available to the international press for background stories, documentaries, and "color" on events like ESPN's 1987 America's Cup Race. It's through his contact with the broadcast world that Mahler learned of Schwem's Gyrozoom. But it wasn't until Mahler spent a tortuous month editing footage he'd shot of a restored 1920's speed boat that the need for Gyrozoom became obvious.

"I tried to shoot the speed boat with a normal lens. We were flying across the surface at 60 mph and we had to get dangerously close to compensate for the lack of control. It was the most difficult editing job I've ever encountered. I knew the museum had to get a Gyrozoom.

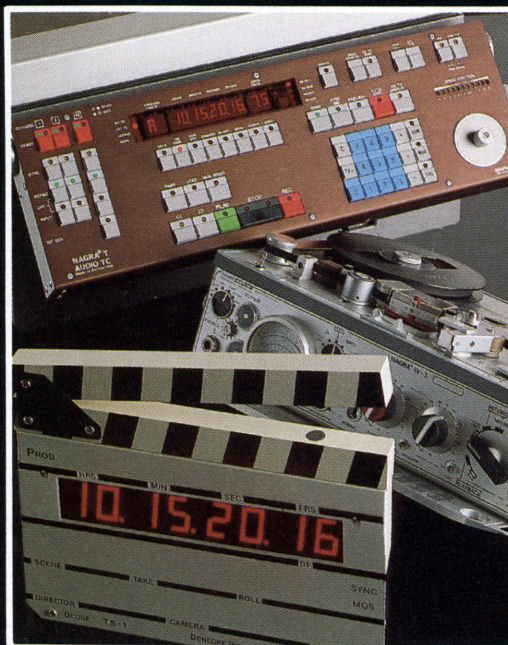
"We covered the start of the race from a helicopter. The image was surprisingly smooth. In fact, the biggest problem I had was convincing the pilot, a veteran of many aerial video sessions, to move away and not worry about the vibration. From there we flew to Montego Bay and covered the rest of the race from a 29-foot speed boat turned press boat.

"Gyrozoom has literally revolutionized ocean race coverage. Not only did it eliminate the natural motion of the seas, it

NOTHING NEW.

Cheers
Dallas
Dynasty
Family Ties
Falcon Crest
Knots Landing
Levis 501 "Wildman"
Seven-Up Co. "Baseball"
Star Trek—The Next Generation
thirtysomething...

Recording audio with center-track Time Code is nothing new to the makers of these shows. Smart producers from coast to coast have already discovered the advantages of using the Nagra IV-S TC Field Recorder and the Nagra T-Audio in post production. By eliminating costly steps in the transfer process, they save time, they save money, they save the audio from unnecessary generation loss. It's your production, it's your time, it's your budget. Next time you put a crew together, make sure there's a Nagra with Time Code on the set.



NAGRA

time code

Call 1-800/228-0241 for our free brochure explaining the best way to record in sync...it's NOTHING NEW.

California 213/469-6391 New York 212/840-0999

OOPS!

WHERE'S THE BLACKWRAP?

You'll need it to:

- COVER SHINY SURFACES TO ELIMINATE GLARE
- MASK LIGHT LEAKS
- CONCEAL CABLE
- MAKE BARN DOORS TO CONTROL SPILL
- MAKE A SNOOT TO SHAPE A BEAM OF LIGHT
- COVER EQUIPMENT FOR WEATHER PROTECTION

BLACKWRAP, flexible matte black aluminum, works because it's form-holding, heat resistant and tough. Cut or tear it in any shape you need. Double it for extra strength. Bent or contoured, lightweight Blackwrap will stay where you put it... And it's easy to remove (no messy adhesive).

BLACKWRAP IS FAST AND CLEAN.

Available from The Great American Market or your fine professional dealer in three convenient sizes:

- 12" x 50' roll
- 24" x 25' roll
- 36" x 25' roll

ONCE YOU GO BLACK
YOU'LL NEVER GO BACK.

BLACKWRAP™

THE
GREAT  AMERICAN
MARKET

826 N. COLE AVENUE HOLLYWOOD CA 90038
TELEPHONE 213/461-0200 • TWX 910 494 1233

also minimized the unnatural 'hopping' of the press boat as we sped from point to point.

"Gyrozoom has also actually improved the race! In the past, cameramen compensating for wave motion with standard lenses have had to interfere with races to get their shots. Either they got too close and kicked up wakes, or they hovered too close, creating air turbulence which played havoc with the sails.

"With Gyrozoom, we were able to 'go on board' with the crew from hundreds of feet away from the boat and the helicopter. 'Go on board' is a term used to describe close-ups of crewmen in action. It was simply impossible from any distance before," Mahler said.

For more information, Schwem Technology Corp., 3305 Vincent Rd., Pleasant Hill, CA (415) 935-1226.



Remote Control Shot Recall

Vinten Equipment Inc. has designed a special prompter interface box which accepts standard ASCII text from any word processor. MicroSwift shot recall instructions are embedded in the prompter copy.

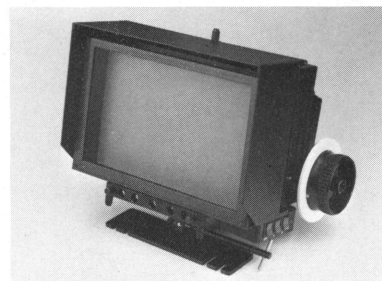
For instance: MicroSwift may be (Camera 1, Shot 3) positioned by text that is embedded within a prompter story. The positioning is totally transparent (Camera 2, Shot 1) to the prompter operator and the talent reading the text.

As the prompter interface box scrolls the text to the prompter, it also "reads" ahead for any commands embedded within the brackets "< >". These commands are translated into the appropriate MicroSwift codes and transmitted via an RS232 interface to MicroSwift. MicroSwift then automatically moves the specified camera to the required shot.

Future enhancements to the MicroSwift system will also allow VTR's and

character generators to be controlled.

For further information: Vinten Equipment Inc., 8115-B Clybourn Avenue, Sun Valley, CA 91352. 818-767-0306.



Obie Light

Arriflex has recently introduced the ARRI Obie Light, a new variable light source that's designed to be both an on-camera obie light, and a regular fill light for low light and tight shooting situations. Most distinctive about the new "Obie One," as ARRI calls it, is that while it's designed for both maximum light output *and* complete control of that output, it's done without affecting either the Obie One's beam angle or color temperature. For the cinematographer, this means that no matter how bright or dim the light is set, its beam angle, and more importantly its color temperature, will always remain the same.

This was accomplished through a total redesign of what an obie light should be. For instance, the Obie One is a *three* bulb light source whose direct light output (not reflected) provides a broad, even pattern continuously adjustable within a two and one half stop range. Its basic intensity ranges are selected with the high, medium or low bulb settings, and then fine tuned within each setting by moving the bulbs and their patented compound reflector in and out with a special focus knob.

The output of Obie One, with three 250W, 120v bulbs at maximum position, and Diffusion Glass #1 in place, is 500 fc at 3 feet, and 125 fc at 6 feet. Obie One will also accept 150W, 120v bulbs for lower intensity output; and 400W, 120v bulbs for higher light levels. Three glass soft-diffuser filters are included: each one will reduce the output f-stop by 1/4 to 1/2 of a stop. In addition, each ARRI Obie Light comes with an easy-change gel filter frame, and a set of one each blue 3216, 3208, 3206, 3204, and 3202 gels. The complete kit includes hood, filter frame, camera mounting bracket (for ARRI), 5x6 and 6.6x6.6 matte boxes, three

IF YOU NEED IT... WE'VE GOT IT.
AND HAVE FOR THE PAST 30 YEARS.



BIRNS & SAWYER, INC.
1026 N. Highland Ave., Hollywood, CA 90038 213-466-8211
FAX 213-466-7049 TELEX 673280 Cable BIRNSAW



HERE'S A LINE ON THE BEST STEADICAM OPERATORS IN THE WORLD:

Our computerized
database provides free
referral information on
operators from Maine
to Manchuria.

215-CALL-CAM
(215-225-5226)

Call Jerry Holway or
Garrett Brown.



WORLDWIDE OPERATOR REFERRALS AND UP-TO-THE-MINUTE STEADICAM INFORMATION.

CLIP & SAVE

PROVEN EXCELLENCE AT YOUR COMMAND!



LARRY WILCOX,
Director/Actor/Producer
Ray Bradbury HBO Theatre

LIGHTS, CAMERA, ACTION!!!

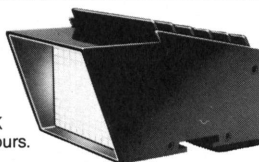
DYNASTY, 60 MINUTES, A-TEAM, FALCON'S CREST, KNIGHT RIDER,
DISNEY, MGM, 20th CENTURY FOX, NASA, JACQUES COUSTEAU, etc.
Our customers demand excellence.

They know that good pictures require good lighting, and **COOL-LUX**
makes the best.

MICRO-LUX "THE CAMCORDER LIGHT"

Greatly improves picture
quality of Low-Lux cameras.
This ingenious micro light
uses only 35 watts at 12 V.
DC (or AC via adaptor). Will
run off (OLYMPIC) L-6.5 for
two full hours. Quartz 3200°K
lamp (included). Life 2000 hours.

Size: 3 1/4" x 1 3/4" x 1 1/4"
Weight: 3 oz.
5 Colors
Material: Aluminum



**GUARANTEED TO IMPROVE CAMCORDER
PERFORMANCE OR YOUR MONEY BACK!**

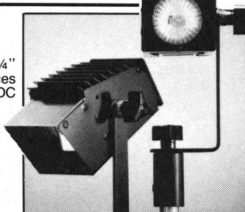
OLYMPIC 12-VOLT POWER BELTS & PACKS

- Up to 1500 recharges.
- More power than NI-CADS (AT LESS THAN HALF THE COST.)
- No "MEMORY" effect.
- Exceptional deep discharge recovery.
- BELTS have built-in charger and voltage monitor circuit with L.E.D. indicators.



OLYMPIC L-13 (13 AH)
Weights 12 lbs.
OLYMPIC L-20 (20 AH)
Weights 16 3/4 lbs.

MINI-COOL STANDARD OF THE INDUSTRY



From major Hollywood studios
to the space shuttle's cockpit,
the MINI-COOL has proven
itself the best photo/video
light in the world.
Sixty support accessories help
you get professional results.

FOR DEALER NEAREST YOU
800-ACDC-LUX
(=223-2589)
IN CA 818-761-8181

You'll be proud of your brilliantly taped memories.

COOL-LUX
lighting ind. inc.

5723 AUCKLAND AVE. N. HOLLYWOOD, CA 91601-2207

Pyrex diffusion screens, five pre-cut color
gels, power cable and carry case.

For more information: Arriflex
Corporation, 500 Route 303, Blauvelt, NY
10913; (914) 353-1400.



New Hero

HOODMAN is the defender of
truth, justice and the right to see glare free
TV outdoors.

HOODMAN's patent pending
hoods eliminate glare on 2-inch through 10-
inch monitors. Constructed of durable ABS
plastic, HOODMAN TV sun shades are the
professional solution to flimsy cardboard
and gaffer's tape rigs of the past.

HOODMAN Laboratories are
currently designing two larger hood models
to accommodate 12 to 14-inch monitors and
17 to 19-inch monitors.

For more information: HOOD-
MAN Corporation, P.O. Box 816, Hermosa
Beach, CA 90254, Phone: (213) 379-6391.



Jib Extension

Video Services Unlimited
(makers of the Stanton Jimmy Jib) has
announced the release of the Jimmy Jib
Giant Extension Kit. This add-on kit quickly

THE NEW ROUGHNECK LAMP IS DESIGNED TO PREVENT THIS.

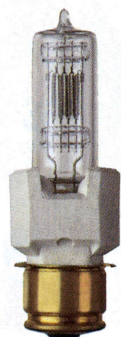
Unlike other tungsten-halogen studio light sources, the new Sylvania RoughNeck™ lamp is designed with a unique supporting collar.

This increases structural strength and enables the lamp to withstand additional torque at its press seal point, so there's less chance of breakage when moving fixtures or relamping.

The new RoughNeck lamp is not only tougher on the outside, it's also tougher on the inside.

Its filament leads are connected to the base with silver solder so that the lamp is much more durable while operating under high temperatures.

And, thanks to new manufacturing tech-



niques, the filament within each RoughNeck lamp is positioned more accurately than ever before.

This means maximum optical performance throughout the life of the lamp. Of course, it also means a tougher standard for other lamps to live up to.

For more information, contact your IED Independent Electrical Distributor or write or call GTE Products Corp., Sylvania Lighting Center, Danvers, MA 01923 (617) 777-1900 ext. 2650.

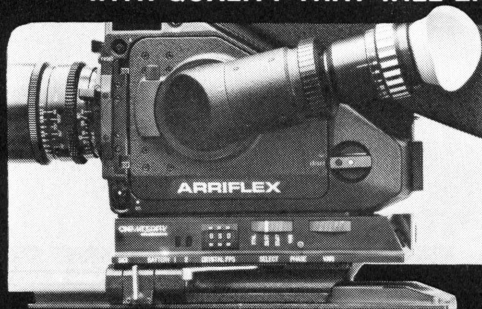


SYLVANIA

GTE

CRYSTAL HIGH SPEED CONTROL

WITH QUALITY THAT WILL ENHANCE YOUR ARRI-3



- 132 CRYSTAL SPEEDS
- 1 fps — 130 fps
- 29.97 & 23.976 fps
- PHASE SHIFTING BUTTON
- PRESETTABLE SPEEDS
- 2 BATTERY MONITORS
- LED TACH
- LED METERS/FEET
- 2 ACCESSORY CONNECTORS
- MACHINED ALUMINUM
- REPLACES RISER BLOCK
- SMOOTH SPEED RAMP

1625 Stanford Street • Santa Monica, California 90404 • USA
Phone (213) 829-1811

CINEMATOGRAPHY
electronics

SINCE 1927

**CREATORS
OF DISTINCTIVE IDEAS AND DESIGNS
FOR SPECIAL PHOTOGRAPHIC EFFECTS
AND OPTICALS
FOR MOTION PICTURE AND TELEVISION.**

**TITLES • MOTION CONTROL GRAPHICS
MINIATURES • MATTE PAINTINGS
BLUE BACKING • INSERTS
SPECIAL UNIT PHOTOGRAPHY
COMPLETE VIDEO LAB
ONE INCH NETWORK AIR TRANSFERS**

B & W TEMP DUPES • 1:1 SOUND TRANSFERS

**HOWARD A.
ANDERSON CO.**

**MAIN OFFICE:
TELEVISION CENTER
1016 NORTH COLE AVE.
HOLLYWOOD, CA 90038
(213) 463-2336**

**CULVER FACILITY:
3767 OVERLAND BLVD.
SUITE 109
CULVER CITY, CA 90034
(213) 559-4369**

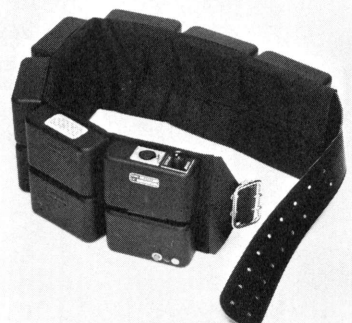


converts the standard length Jimmy Jib II, which reaches a height of 13 feet, to the Giant Jib that can place a camera 20 feet in the air.

Conversion takes about 5 minutes and requires no tools. The new system still breaks down to 6 feet 5 inches and adds only 30 lbs. to the 46 lbs. of the standard length Jimmy Jib.

Also new from Video Services Unlimited is the Stanton Remote Pan, Tilt Head Kit. This servo driven head allows joystick control of pan, tilt, zoom and focus and will operate both Canon and Fujinon lenses. The most interesting thing, however, is the head's ability to be used as either a servo driven remote head or as a tripod mounted, manual pan, tilt head. This is accomplished by disengaging the pan and tilt servos with a simple thumb screw, and reengaging the integral fluid type dampeners for manual panning and tilting.

For more information: Video Services Unlimited, 2720 E. Thomas Road, Phoenix, AZ 85016. (602) 224-6162.



Batteries for ENG Crews

Cine 60 introduces the KFC battery. Made especially for use by ENG crews, this battery is equipped with its own built-in two-rate charging system which fully charges it in four hours, then keeps it ready for use indefinitely by maintaining it fully charged while preventing dangerous heat build-up and deterioration through overcharging.

Just as light in weight as Cine 60's regular batteries, the KFC batteries have built-in visual indicators and sensing circuits providing continual monitoring of charge status.

The benefits offered by KFC are: KFC types can be kept on charge indefinitely and ready for use at a moment's notice. They can be fully charged in four hours without requiring an external charger. They are man-

THE TOP CUT IN EDITING

with CTM's flatbeds



The new line of CTM machines has been specifically designed for the interface between film and video technology.

Editing

With 16, 35 and 16/35 mm tables available in 2, 4, 6, and 8 plates models, CTM's machines provide today's exacting requirements at a better price:

- 18 faces revolving prism providing a crisp high quality picture without flicker.
- crystal controlled motors.
- stereo sound input and output.
- amplifier enabling any combination of sound tracks up to 12 inputs.
- wider screen capability 420 x 315 mm.
- universal counter providing up to 4 counting modes (time, frames, metres and feet in any sizes) with instant conversion between modes.
- smooth careful film transport.
- folded position of the table when not used.
- just to name a few.

Telecine

The use of 16, 35 or 16/35 mm Telecine module provides the users with a flexible machine enabling them to:

- edit and view film in a standard way
- transfer film at any stage in its post production to video. Thus giving a video copy of their choice without releasing the film to outside agencies.

Video sound post production

The CTM video sound editing table offers a convincing solution to video sound post production.

With a biphasic pulse generator mounted in the master flatbed and a video synchronizer, the video cassette machine in U-format is electronically locked with the magnetic film transport, thus allowing the editing of perforated sound tracks on a video tape.

Sound mixing and recording

High quality audio outputs provided from an optimum sound system consisting of swivel sound rollers, adjustable dampers and fly wheels. Together with a 16, 35 or 16/35 mm recording module mounted on the 3rd track and connected to a mixer, the system allows the creation of a rough recorded sound mix.

Please apply for detailed information !

CTM

84, rue Paul-Vaillant Couturier
92300 Levallois-Perret France
Phone (1) 47.37.48.24
Télex 270 105 FTX FRA réf. 685.

ufactured in battery belt and battery pack styles.

For more information: Cine 60, 630 9th Ave., New York, NY 10036, (212) 586-8782.



"Perfect Pack"

Cool-Lux Lighting has designed a camcorder lighting package. Called the "Perfect Pack," it includes the Micro-Lux (camcorder light), a 2.5 ampere hour (Ni-Cad) battery and an AC adapter for household current.

It is so cool, it can be held in the palm of your hands. The 2.5 amh. battery has one hour running time, and the AC adapter is included for use with 120 volts.

For more information: Cool-Lux Lighting, 5723 Auckland Ave., N. Hollywood, CA 91601. (818) 761-8181.



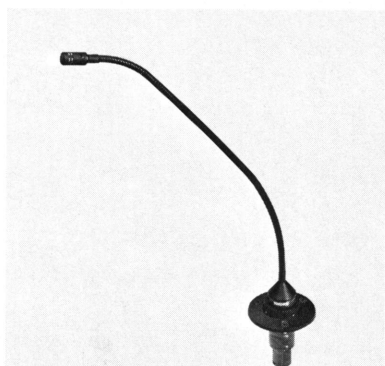
PogoCam System

International Camera Systems has introduced the Pogo Camera which is part of their PogoCam System, a body support system that requires no harness to support the camera and video system. The Pogo Camera is a modified Eyemo Camera with unique features. It has a nine speed crystal motor (12, 15, 18, 20, 24, 30, 32, 40, 48 frame rate); interchangeable lens mounts (Zeiss, Cannon & Nikon); large LED readouts (Frame rate & footage counter); out of sync light for crystal motor; memory on the

footage counter; inching knob; total weight 6½ lbs.

The camera is available for splash housings, helmet cameras and other unique applications where a small light-weight 35mm camera is required.

For more information: International Camera Systems, 7240 Valjean Avenue, Van Nuys, CA 91406, (818) 989-5222.



Gooseneck Mike

Shure Brothers Inc. has announced the introduction of the Model SM99 Miniature Condenser Microphone for gooseneck-mount applications. The SM99 features a 1 cm. precision condenser element and on-board preamplifier. It exhibits a symmetrical supercardioid polar pattern for excellent isolation and maximum gain-before-feedback. Designed for sound reinforcement applications that require wide frequency response and unobtrusive appearance, the SM99 comes supplied with a pop filter that makes it especially suitable for speech and musical pickup.

Very quiet in operation, the SM99 has a wide dynamic range and low distortion. The microphone is also highly reliable, operating over wide ranges of temperature and humidity, and it features complete RF protection.

The SM99 accommodates a wide variety of mounting options as well. It can be plugged directly into any surface-mounted 3-socket XLR-type connector, or permanently installed by using the supplied mounting flange. In addition, standard Shure swivel adapters can be used to mount the SM99 on a conventional microphone stand.

For more information: Shure Brothers Inc., 222 Hartrey Avenue, Evanston, IL 60202. (312) 866-2553. △

PANAVISION®

WORLDWIDE REPRESENTATIVES

AUSTRALIA
SYDNEY
SAMUELSON
FILM SERVICE
PTY. LTD.
61-2-436-1844

MELBOURNE
SAMUELSON
FILM SERVICE
PTY. LTD.
61-3-646-3044

CANADA
MONTREAL
PANAVISION
(CANADA) LTD.
514-866-7262

TORONTO
PANAVISION
(CANADA) LTD.
416-752-7670

VANCOUVER
PANAVISION
(CANADA) LTD.
604-873-3901

CHINA
BEIJING
SALON FILMS
(HONG KONG) LTD.
c/o CHINA FILM
EQUIPMENT CO.
86-1-2013493

FRANCE
PARIS
SAMUELSON
ALGA CINEMA
33-1-4-328-5830

GERMANY
MUNICH
FGV SCHMIDLE
& FITZ
49-89-690-7070

HONG KONG
CAUSEWAY BAY
SALON FILMS
(HONG KONG) LTD.
85-2-376-43123

ITALY
ROME
A.R.C.O. DUE
396-617-4844

JAPAN
TOKYO
SANWA-CINE
EQUIPMENT
81-3-404-0366

MEXICO
MEXICO CITY
TRATAFILMS, S.A.
905-680-3500

PHILLIPPINES
MANILA
SALON FILMS
(PHILLIPPINES) LTD.
63-2-881691

SCANDINAVIA
STOCKHOLM
FILM AB RUNE
ERICSON
468-734-0845

SPAIN
MADRID
CAMARA RENT
341-733-4131

BARCELONA
CAMARA RENT
34-3-323-2491

THAILAND
BANGKOK
SALON FILMS
(THAILAND) LTD.
66-2-252-8591

UNITED KINGDOM
LONDON
SAMUELSON
FILM SERVICE
(LONDON) LTD.
44-1-452-8090

UNITED STATES
CALIFORNIA
TARZANA,
LOS ANGELES
PANAVISION, INC.
818-881-1702

HOLLYWOOD
PANAVISION, J.D.C.
213-464-3800

SAN FRANCISCO
CINE RENT WEST/
STAGE A
415-864-4644

FLORIDA
MIAMI
CINE VIDEO TECH
305-754-2611

GEORGIA
ATLANTA
VICTOR DUNCAN,
INC.
404-355-3001

ILLINOIS
CHICAGO
VICTOR DUNCAN,
INC.
312-943-7300

MICHIGAN
DETROIT
VICTOR DUNCAN,
INC.
313-471-1600

NEW YORK
NEW YORK CITY
GENERAL CAMERA
212-594-8700

TEXAS
DALLAS
VICTOR DUNCAN,
INC.
214-869-0200

CHALLENGE



A New Standard In Lenses Which Cannot Be Ignored.

No other art form has the dimensions of film. None has the power to inspire people so thoroughly. And nowhere in filmmaking are the technical demands as great as they are for your lenses.

The Primo series is only the latest in Panavision's



A Lee/Panavision International Company

family of new and refined, precision lenses. When you're ready to put the truest quality images on the screen, let us offer you this bit of inspiration. The finest motion picture optics in the world are ready and waiting...at your service.

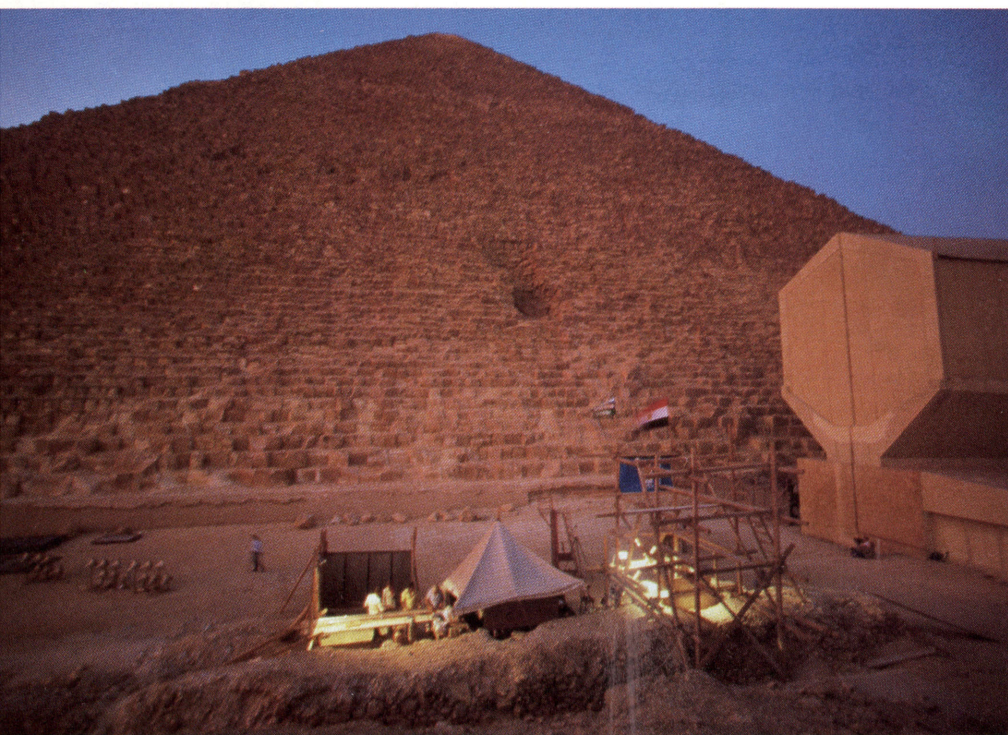


Photo by James P. Blair

Markab! – Ship of Souls

by Nora Lee

Over 4,600 years ago the great Egyptian ruler Khufu (Cheops) was prepared for his trip to the afterlife. He was buried in a tomb destined to become one of the great wonders of the world, the Great Pyramid of Khufu. He left behind him dark mysteries as yet unraveled and hidden chambers as yet undiscovered.

In 1954, in a pit 102 feet long, 11.5 feet deep and 8.5 feet wide, a piece of Khufu's puzzle was uncovered – a perfectly preserved royal boat. It had been dismantled for some still mysterious reason and when restorers put the pieces together it was 142 feet long.

For more than 30 years researchers have tried to discover

the royal boat's purpose. But it wasn't until 1987 that another puzzle piece was uncovered. An international team of scientists, sponsored by the Egyptian Antiquities Organization and the National Geographic Society, began high-tech preparations to investigate a second pit believed to hold a sister boat – a second royal barge.

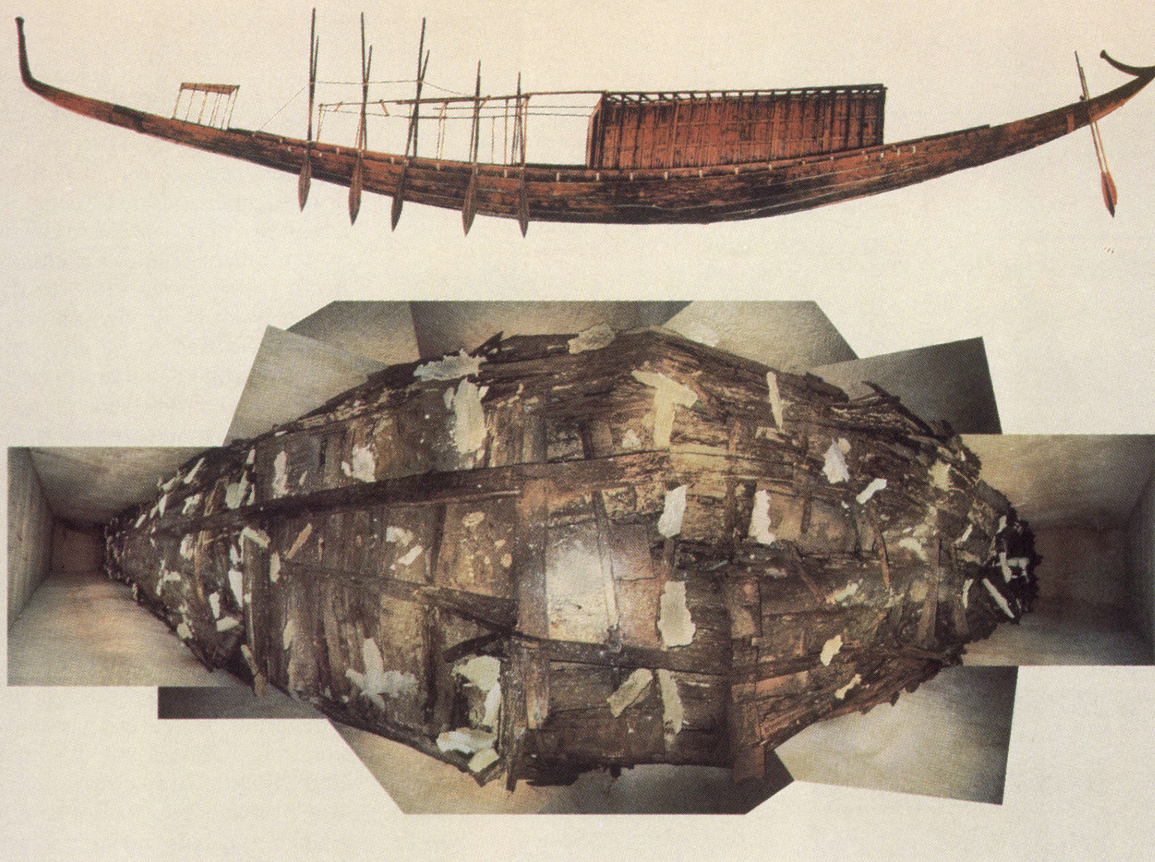
They had two major constraints: First, all exploration had to be done through an airlock. No air could escape and none could be let in. The original atmosphere in the pit had to be sampled and analyzed, just in case it had remained unpolluted for more than 40 centuries. Secondly, the temperature in

the tomb had to be maintained. In other words – look, but don't touch.

For years, the National Geographic Society had been looking for ways to investigate tombs and other ancient sites without sending in people or letting in modern polluted air that might damage the contents. In this instance there was another reason to work through an airlock. When the first ship was discovered in 1954, the tomb had been hermetically sealed. The discoverers claimed they could "smell history" by detecting the odor of cedar. If this tomb's seal was still intact, the ancient air could provide clues about conditions in which to store ancient artifacts and suggest some of the changes in earth's atmosphere over the centuries.

Obviously, some sort of drilling and camera system was needed. The problem was turned over to Claude "Pete" Petrone. Petrone, with the official title of manager of special projects, has been handed these impossible missions for almost 33 years. His job description at the National Geographic indicates that anytime anyone doing work for the Society needs photographic equipment other than standard issue, he's the man to call. And his fields of expertise include still photography, videography and cinematography, with a dash of physics and a healthy heap of engineering. His formal background is as a still photographer and includes a stint in the U.S. Marines shooting still and motion pictures.

When asked to hit the high points of his long career, he came up with a partial list of "firsts." "The first time there was a manned flight into space, the National Geographic was involved in setting up the photo pool down at Cape Canaveral. At that time the pool consisted of the wire services and a few magazines. I was lucky enough to be the first one selected to work in the photography laboratories. I designed equipment to develop the film of the photographers shooting the launch. That evolved into a project that led me to Hawaii



Opposite page:
Expedition at the base of the Great Pyramid of Khufu, photographing, but not disturbing, an underground, 4,600-year-old boat. Building at right houses a similar vessel, Pharaoh Khufu's first ship, discovered in 1954. Left: Reconstructed museum piece (top), and a mosaic of ten images from the new pit. Bits of white mortar have fallen from between the stone blocks which cap the underground chamber.

to set up a lab at Hickam Field to develop film and then, when the spacecraft was recovered, we developed that film and released it to news people throughout the world," reminisced Petrone.

"On another assignment, we went to the Cayman Islands and went diving in the Cayman Trench. I helped design a film developing lab for on board our ship. It was 1976 and it was probably the first time color film was developed at sea. Up until that time, the scientists from Woods Hole Oceanographic Institute and elsewhere could only develop black and white film in the field. Our instant transparencies made it possible for them to better determine what it was they were seeing.

"Later still, we did a project in the Galapagos Islands photographing the hot water vents. Here we developed a processing system for color that used more salt water than fresh water. The process allowed us to save much of the fresh water on the ship for other needs."

Each challenge has been different and demanding. For the Egyptian adventure, Petrone realized he would need the advice of many experts. It had been decided

that the best approach was to drill through one of the limestone blocks that served as a roof for the entombed ship. Testing revealed that the limestone was relatively soft, but no lubricants could be used during drilling and there was still the problem of the airlock. "Luckily I was able to meet Bob Moores of the Black & Decker Corporation. He is an amateur Egyptologist and a research engineer who designs small tools for Black & Decker. He came up with the design for the drill and airlock. It's new, ingenious, and really very simple. He solved our problem regarding the air getting in and out and gave us a hole large enough that our camera could move into the tomb."

The airlock consisted of a rotating assembly mounted on a circular steel plate that in turn was fixed to the limestone block. When the assembly was moved over the hole in the plate it made an opening through which the drill shaft or camera assembly could be lowered. When it was rotated away from the hole, it sealed it tight.

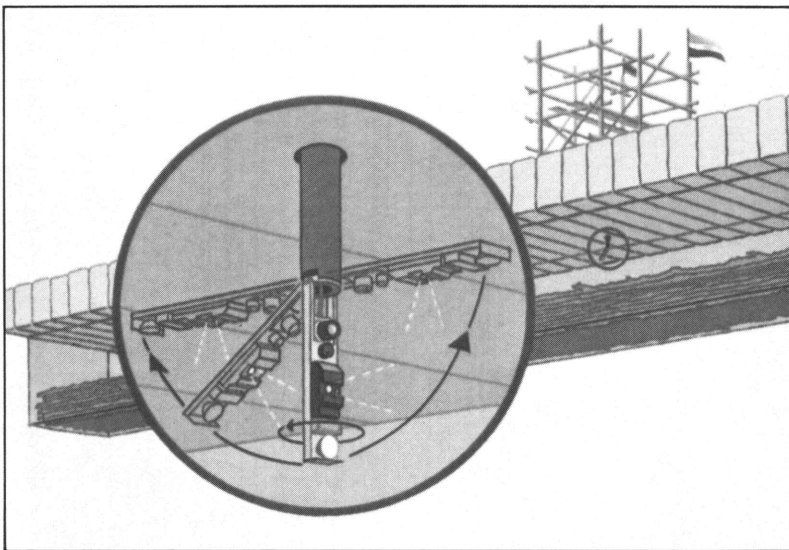
In the beginning, Petrone was not sure how large a hole would be necessary. He began by assuming something as small as

half an inch in diameter – enough to accommodate an endoscope. "We progressed up until we determined exactly what we needed to accommodate our equipment. We wanted to use a still camera and a video camera, if we could. The diameter of the completed camera assembly was $3\frac{3}{4}$ and the size of the hole drilled was $3\frac{1}{2}$ inches."

This pit, like the one excavated in 1954, was covered in blocks of limestone weighing about 15 tons each and measuring five to six feet thick. In order to test theories and equipment, a mock-up was engineered in a warehouse near Washington, D.C. "We used Indiana limestone – which is the nearest thing to the stone we would be drilling through in Egypt. From this test we could see if the drill and the arm worked and how good the coverage would be with the light source we were using," explained Petrone.

Petrone devised an arm that, after it was inserted in the hole, would pivot 180 degrees and rotate 360 degrees to permit full coverage of the contents of the tomb. The primary arm consisted of a still camera, a color video camera, a strobe light and a viewing

Right: *Rigged with a video camera, strobe light sensor, 35mm still camera, strobe light with UV filter, and viewing light, the assembly pivots 180 degrees and rotates 360, permitting full documentation of the pit's interior. Below: National Geographic photography expert Claude "Pete" Petrone, with the probe he designed to shoot the mosaic on page 31.*



Painting by Pierre Mion



Photo by James P. Blair

light. A secondary arm, and the one that actually made the first trip into the tomb, was fitted with only a Rees 93 black and white video camera and a light source.

All the equipment attached to the arm had to be modified to one extent or another. The Rees unit, which is made in Great Britain, was chosen because of its rugged dependability. Said Petrone, "It's a very useful piece of equipment and had been used to examine nuclear reactors. It was sealed quite well, and it had a zoom lens that was remotely focusable, as well as a diaphragm that we could control from the surface.

"We had to modify the Rees unit. As it came off the shelf, it

had no light source in it. We had to make a hole in the back plate behind the lens assembly and run the fiber optic guide in there so that it did not affect the motor operation of the zoom lens. Then we had to make a face plate that would allow the light guide to issue about $\frac{1}{16}$ of an inch in front of the Plexiglas face we made for it. We hoped that would take care of any lost light we had in the plastic itself," said Petrone. It was the Rees camera that provided the first look at the ancient tomb.

Although Petrone had two-and-a-half days to investigate the tomb with his camera, his greatest fear was that the first look might be the only look. "My plan was to cover the boat from tip to tip on the first pass with as many varied views as I could get. If anything happened and we could not go back in again – we would have a basic documentary." In the end he gathered five rolls of still film and five video cassettes worth of information. He was able to piece together an incredible mosaic that showed the entire chamber – including quarry marks on the wall.

One of the disappointments of the expedition was the discovery that this tomb was not sealed. Air samples taken from different levels in the chamber indicated the ancient air had mixed with surface air. Still, all exploration continued as if the tomb had been sealed.

The arm that followed the one containing the Rees unit also had modified equipment. The Canon still camera had to be fitted with a remote shutter release in the photo equipment shop so it could be fired from above. The built-in strobe was not strong enough, so the camera had to be adapted to take a modified Vivitar strobe that would extend the flash range beyond the normal eight or nine feet. This was done with Canon's help. The still camera was loaded with Kodak VRG 200 to afford maximum flexibility.

The Sony DXC-37 color video camera was modified with the help of Phil Leonnardi of the Geographics photo department, recalls Petrone. "The camera, as it came from Sony's industrial division, had a lens assembly connected to circuit boards built into a nice little unit about six inches long and an inch-and-a-half wide and 2 inches thick. That doesn't sound like much of a problem in itself, but because the arm I was using was powered by a small mobile DC unit, I wanted as little weight as possible on the arm itself. I didn't want to put the whole camera on the arm. We separated the CCD chip from the rest of the camera by a foot-and-a-half. The upper part of the arm – beyond the motor, beyond the mobile part – housed the rest of the components of the video camera, the components of the strobe unit and the power supply we needed for it. The arm itself had very little on it except the actual things that were taking the pictures, providing the light and sensing the light. Everything else was up inside the shaft."

The final pieces of equipment were the ultraviolet filters. Explained Petrone, "The ultraviolet filter over the strobe and on the fiber optic light was put there to hold down the emission of ultraviolet rays from whatever light source we used. They were used to protect the boat – not enhance the photography. But, I religiously use a UV filter on all my cameras because it gives a more realistic rendering of the subject. Here, where we had a secondary motive, it was far more

practical to use a filter on the light source itself. We had the effect of having a UV filter on the lens with the added protection of not letting any UV light escape down into the tomb."

Petrone admitted to over a year-and-a-half of preparation for the big moment. "If you've gone this far and worked this hard, when you come back you want to be able to say that you did the best you could."

He seemed to find it difficult to describe his feelings as the camera was lowered into the shaft for the first time, searching for a boat unseen for 46 centuries. "The first camera went down at 3:30 in the morning. We had been up for 12 to 14 hours at that stage. The scientists had begun to realize that we were very near the discovery of the boat. Everything started going faster and faster."

"Before we sent the camera down, we had to assemble everything on the surface – lay it out on wooden tables with the help of the Egyptian workmen and Tim Taylor, the technical representative from Rees Instrument Company. We put the camera assembly together and hoisted it into position and inserted it in through the airlock. We had an outside monitor so we could all watch."

"As we were lowering it down in the hole everybody was anxiously gathered around the monitor. As luck would have it, the light was shining straight down from the descending instrument, and as it emerged from the hole we could see the wooden timbers begin to appear in the dim light. Everybody was overjoyed and I was darned pleased that something actually worked and we would get what we had come for!"

But the night wasn't without its moment of panic. "Just before we lowered it, we assembled the camera, the housing and the insertion tube in the vertical position inside the platform that was made for this reason. It was laid right over the air lock. At this time we 'smoke test' to make sure everything doesn't go up in smoke – that's what smoke test means. Ev-

erything worked fine, except... except something must have happened to the movable arm in the shipping. It would not fit into the insertion tube. It was about 1/2 inch out of alignment."

"My boss, Bill Garnett, editor-in-chief, is sitting up on the platform watching us. I'm thinking Well, here it goes.' I had a metal tape measure on my belt and my Swiss Army Knife. With my knife I whittled metal shims from the tape measure, loosened the bolts on the side of the bracket and used the shims to get everything back into alignment. Then, by golly, it went into the hole. That was the one time I was scared," Petrone said with a smile.

The entire expedition was a tremendous success and the effort was documented in the National Geographic Explorer series, "Pharaoh's Voyage for Eternity." But the equipment Petrone designed and engineered has not been retired. Plans are currently underway to send it into all kinds of cracks and crevices around the world. Ultimately Petrone hopes it will be used to explore the Ming temple and tombs in China.

The camera is the outgrowth of a new way of looking at our ancient heritage. "This idea of not disturbing archeological finds is totally different from past approaches. Very recently people all over the world have come to the realization that if we remove everything from the ancient sites then future generations will only be able to observe the past in museums. They won't be able to get a real feeling for the artifacts and the role nature has in preserving them. There are proposals to leave the boat where it is and insert another video camera through the airlocks into the tomb so that visitors can see what the Egyptians did to preserve the ship and how they laid it out," concluded Petrone.

Mysteries and enigmas abound in Egypt and elsewhere. Perhaps with equipment like that developed by Pete Petrone and others, the mysteries can be solved without disturbing the magic. △



at

PS-A

**42' FEATURE
Tractor-Trailer
Rigs**

with

**Twin 1000 AMP
CRAWFORDS**

**10 Ton Grip or
Electric Truck**

5 Ton Grip Trucks

Super Grip Vans

1 Ton Grip Vans

Studio Crane Trucks

PS-A Camera Trucks

Crew Cabs

with 5th Wheel

Equipment Trailers

PS-A

PRODUCTION SERVICES-ATLANTA

**Equipment Rental
Sales & Service**

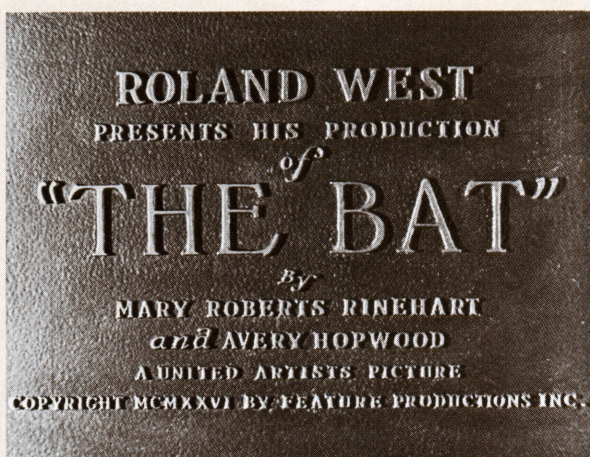
404/622-1311

**2000 LAKEWOOD WAY, BLDG 4.
ATLANTA, GA 30315**

A Gathering of Bats

by Scott MacQueen

The making of the 35mm and 65mm versions of *The Bat Whispers*, the famed 1930 crime drama, was described in the March 1986 issue of this magazine. At that time, the wide film version – unseen for more than a half-century – was in an early stage of a difficult restoration process at the UCLA Film Archive. The original 1926 silent version, *The Bat*, was considered a “lost film.” Since then a deteriorating 35mm nitrate print of the silent picture – a key film of the period – has been found and rescued from destruction and the wide film version has been shown publicly. None of this “just happened.” ...



“The Bat always flies at night,” the title character said at the climax of *The Bat Whispers*. True to the spirit of the screen’s arch-criminal, UCLA film archivist Robert Gitt boarded the Redeye in Los Angeles one midnight last December and flew east into the Ohio dawn, carrying a new showprint of reels two through nine of the silent *The Bat* and – fresh from the lab – the final reel of *The Bat Whispers* in wide film format.

John Ewing, director of the Cleveland Cinematheque at the Cleveland Institute of Art, had ensured that the centenary of Roland West – producer and director of all three Bat films – would not pass without formal observation in his Ohio home town. These films would form the centerpiece of the most comprehensive retrospective of West’s films ever assembled.

West was born in Cleveland in 1887, into a family of theater people, and by age 17 he was playing juveniles in New York and on the road. In vaudeville he made the acquaintance of Joseph Schenck, and as Schenck moved into films West went with him, eventually handling a number of pictures featuring Mrs. Schenck, the popular Norma Talmadge. West’s original

play *The Unknown Purple* was a melodramatic hit on Broadway in 1918, and after his return to films in 1920 West filmed it along with several other crime melodramas, specializing in the genre. A number of these, including the phenomenal hit *The Bat*, starred Mrs. West, former Fox star Jewel Carmen. West made one of the most stunning sound-film debuts with *Alibi* in 1929, followed it up with the spectacular *The Bat Whispers*, and made only one more film, *Corsair*, before voluntarily retiring from the business. His hinted involvement in the death of his mistress, actress Thelma Todd, destroyed any possibility that he might return to films and he finished his days in wealthy obscurity, dying in 1952.

Ewing didn’t know any of West’s films, but devotedly sought them out for his December programs. A beautiful 35mm vault copy of *The Monster* with Lon Chaney was supplied by Turner Entertainment, with Dennis James providing live accompaniment. The distributor of two long-lost Norma Talmadge features proved unable or unwilling to supply showprints. The UCLA Film Archives had just completed restoring the 35mm version of *The Bat Whispers*, was nearing completion of the 65mm version, and had stumbled across most of the greatest rarity in West’s canon – the 1926 silent version of *The Bat*. UCLA agreed that the Cleveland fest was the perfect occasion for the unveiling.

Gitt located the existing elements of *The Bat Whispers* with The Mary Pickford Company. She had purchased the property in the late 1930s with the intention of remaking it with Lillian Gish and Humphrey Bogart. Examining the holdings, Gitt was faced with a bewildering array of elements.



Above: Main title.
Right: *The Bat* slides down from the roof of the bank to his waiting 1926 Batmobile. (All photos in this story are frames from original nitrate films).

Gideon Bell's skyscraper apartment, designed by William Cameron Menzies.



The camera negative for the 35mm domestic version was not there, having been lost long ago to Astor Pictures, who handled it in reissue in later years. All that remained of this edition was a 1930 lavender print and positive soundtrack. The 1930 equivalent of a fine grain positive, the lavender was grainy and milky with absolutely no sparkle. Fortunately it did not have to be used as the collection also held a 35mm original camera negative compiled of alternate takes for overseas use. Gitt weighed the wisdom of using this negative for the restoration and decided that the differences in readings and performance were so slight that there was no question of using it. Shot for shot the domestic and overseas versions are identical; Gitt opted for maximum pictorial quality. The elements were in remarkably good condition considering their age, although some shrinkage and browning of the nitrate soundtrack was beginning. "We really got to these materials just in time," says Gitt.

YCM Labs of Burbank initially made a wet-gate showprint from the camera negative. This is the print that was shown in Cleveland, and it is of superb quality. But one showprint does not constitute preservation; once the timings were checked by Felipe Herba, YCM then made a wet-gate, fine grain preservation master.

"We also decided to copy the very end of the

picture from the American lavender and preserve it separately, as the end titles played differently and had slightly more exit music," says Gitt. "This way, we have it should a historian need to consult it."

West took the gamble of filming *The Bat Whispers* in 65mm and purchased a camera himself, calling his process "Magnifilm." In 1930 it was believed that widescreen would be the next major, standard industry technology. We forget today that some dozen feature films were made and exhibited in this period in gauges ranging from 56mm to 70mm. The discontent of the exhibitors over the expense and lack of standardization caused the Hays Office to ban widefilm before the end of 1930. Until The Museum of Modern Art resurrected *The Big Trail* in 1985 from its Grandeur 70mm negatives, none of these films had been seen in over 50 years.

Providentially, the holdings included these widescreen elements of *The Bat Whispers*: 65mm camera picture negative; 65mm master positive lavender; 35mm optical sound negative for "Magnifilm" recorded at 112½ feet-per-minute; 35mm positive optical soundtrack for "Magnifilm." Curiously there was also a dubbed down, 35mm positive optical soundtrack for the widescreen version running at 90 feet-per-minute and labelled "for reduced picture," suggesting that United Artists seriously considered preparing optically-reduced widescreen prints on standard 35mm

Three establishing shots from *The Bat*: the city, a suburban bank and a country mansion. The full moon is a unifying motif in Ned Mann's miniature settings.



film in the manner of MGM's Realife process, which *was* distributed this way. As one Schenck to another, it's conceivable that brother Nicholas of Loews/MGM considered providing Joseph of UA with an outlet for product!

The widescreen soundtracks (both negative and positive) were shrunk and curling. To make a new print from the shrunk negative and then rerecord it would induce flutter, so the nitrate positive 112½ feet-per-minute track was played on a sound

dummy and transferred to 35mm magnetic stock by Ralph Sargent at Film Technology Company with an optical pick-up that could handle the accelerated speed. Clicks and pops were then carefully scraped from the mag track by hand with a razor blade. The Western Electric variable density track proved to have a very wide dynamic range, with the thunder effects deliberately ear-shattering against low dialogue. The new track was *not* compressed but left full range, with dbx™ noise reduction applied only to sections of absolute silence.

When Don Hagans of YCM Labs first reviewed the camera negative he was encouraged; it corresponded to modern standard 65mm. The archaic shape and sprocket allocations of Grandeur 70mm had forced MoMA to make their preservation masters of *The Big Trail* in 35mm anamorphic. However, Linwood Dunn, ASC, donated to the project a 65mm Bell & Howell printer, allowing Richard Dayton and Pete Commandini to make a direct B&W 65mm fine grain master of *The Bat Whispers* on Kodak 5235 stock. A compressed air system in the printing gate was used to overcome the tendency of the 65mm negative to curl, ensuring film registration. The lab was not able to time the fine grain scene-to-scene, but cinematographers Robert Planck, ASC, and Ray June, ASC, had done their job exceedingly well; they had lit their sets so carefully 57 years ago that the overall exposures were consistent and yielded an excellent one-light print.

Gitt cherished the idea of presenting *The Bat Whispers* in a 70mm showprint (70mm is the print format for 65mm negative), but 70mm *print* stock is only manufactured now in color. Not only would color print stock compromise the tone of the B&W image, but it is expensive and could only be shown at a handful of institutions equipped for 70mm projection. Gitt elected to make a B&W 35mm reduction dupe anamorphic negative, and a print from that. As the original photography has an aspect ratio of 2:1 versus today's CinemaScope standard of 2.35:1, a black border was left on either side. This way the widescreen version can be presented now by any facility equipped with standard 35mm projectors and anamorphic lenses, although in the future it will still be possible to strike a direct 70mm print (even if on color stock) from the 65mm B&W safety film fine grain master.

Gitt was surprised to find a slight difference between the 65mm camera negative and the 65mm lavender made in 1930. "They must have changed their minds after the initial previews and recut the ending in the negative, but only after the lavender had been prepared. In the camera negative, Chester Morris delivers his 'mad scene' closing lines in close-up, just as he does in the 35mm version. As he laughs there is a chemical fade out in the negative and we go into the epilogue. When I examined the lavender I discovered that West had originally kept this scene in long-shot, with the entire cast surrounding Morris. As he delivers his last line, a theater curtain closes over the scene and the camera pulls back to reveal the interior of a theater for the epilogue, as though we've been watching a stage

performance! Reasoning that *this* was the way West originally intended to end the film, we went back to the lavender and copied this ending, along with about thirty seconds of additional curtain speech that Morris delivers. Both endings have been preserved, but the 'curtain' ending is the one we kept in the showprint."

The widescreen version plays very much like its junior version, though West uses fewer close-ups, substituting two-shots more suited compositionally to the 2:1 frame. The major disappointment with the widescreen version is that the most spectacular camera moves and effects of the miniature city and railway are optically blown up dupe footage from the 35mm version. The longer focal length lenses required for 65mm film are probably to blame; a 50mm lens in 35mm photography is roughly equivalent to a 100mm lens for 65mm photography. It must have proven difficult to maintain the proper scale of the miniatures with long lenses while holding any depth-of-field.

Indeed, the picture displays a uniformly shallow depth-of-field attributable to the limitations of the lenses, causing the cameramen to rack focus more often by need than design. The additional tendency of the lenses to induce slight distortion or softness at the edges of the frame can only make one marvel at how smoothly Robert Planck, ASC, dealt with the limitations of his highly experimental equipment. Where travelling shots *are* employed with miniature sets and photographed in 65mm (such as the emblematic "bat's-eye" view of the mansion during a lightning storm) or in the overhead tracking shot pursuing Chester Morris through the garden, they are stunning.

Restoration work on these films occupied Gitt through the summer of 1987 and he avoided going "batty" by concurrently addressing other projects such as restorations of *She Wore A Yellow Ribbon* and Selznick's *A Star Is Born* from original Technicolor negatives.

A phone call arrived from Tom Trusky of Boise State University. They had been given some old nitrate film by a local collector, Raymond J. Bungard, M.D., F.A.C.S. Would UCLA be interested in the film? Gitt inquired after the subjects and Trusky mentioned *The Bat*. "You must mean *The Bat Whispers*," Gitt rejoined and explained that UCLA had already preserved it. No, countered Trusky, the leaders said *The Bat*, it was silent and in eight reels. Gitt tried to remain a healthy skeptic as the silent nine-reeler was a legendary lost film, but his skepticism happily evaporated when Dr. Bungard's print arrived in Los Angeles. It was indeed the lost silent, but only eight out of the nine reels. Reel One had become separated from the balance of the print long ago under circumstances that couldn't quite be reconstructed.

As the nitrate print was examined on the bench the ravages of time became all too apparent. Gitt guesses that if the film had surfaced three months later it might have remained "lost." The ends of most reels, would tightly on their cores, were crumbling into powder and sometimes only single frames could be salvaged and "frozen" in the optical printer. Reel Nine



Japanese actor Sojin is dwarfed by the sitting room of the Fleming mansion.

was the worst, very splicy and missing perhaps 200 feet – the entire sequence of *The Bat*'s escape from the trunk room is gone. Overall the print was shrunk, brittle and badly buckled. Sprocket holes were worn, cracking and tearing out to the edge. The first test "breathed," weaving in and out of focus so badly that the lab, Film Technology Company, immersed the entire film in redimensioning solution for two weeks. The film's stability was greatly improved but it still required step printing with a curved gate to bend the buckled film at a gentle angle.

Gitt resigned himself to presenting *The Bat* at the Cleveland Cinematheque without its original Reel One, grateful enough that the balance of the film survived. It was the most expendable reel for pure storytelling, being a prologue that West wrote specifically for the film which featured no major characters save *The Bat*. Reel Two begins virtually at "Curtain Up" from Act One of the play. In any event, a synthetic Reel One could be cobbled from *The Bat Whispers*, as existing synopses showed that the incidents of the prologue were identical in both versions.

In Idaho, Tom Trusky was dissatisfied. He believed the missing reel still existed, mislaid and forgotten. He realized it was imperative to locate it as the Boise print was probably the only surviving copy. Like a latter-day Holmes and Watson, Trusky and Dr. Bungard sifted the minutiae of twenty years to uncover clues to its whereabouts. They succeeded, locating the unique roll of nitrate in May 1988. Save for a handful of deteriorated shots, *The Bat* is now intact.

The rediscovery of a lost film, particularly one that was so well received and so influential in its day, always carries an attendant danger of unfulfilled expectations. The films themselves, of course, don't change: tastes change, circumstances change, and we, the audience, change most of all. *The Bat* is not the masterpiece one might have expected, indeed it is not as vibrant as certain later examples of the genre like *The Cat and the Canary* and *Seven Footprints to Satan*. Historically, it is an important film, being the model for all that followed. It was the long-awaited filming of the theatrical smash of its day, akin to the impact *Cats* or *A*



Chorus Line would have on theatergoers in the 1980s. As a thriller film it is second only to *The Phantom of the Opera* for the nightmares it gave our grandparents' generation. One mid-western boy named Ray Bradbury recalled *The Bat* with such terror and delight over a quarter century later that he imparted it to the life experience of his autobiographical juvenile hero in "Dandelion Wine"!

We should be especially grateful to Tom Trusky and Dr. Bungard for their perseverance in locating Reel One. Just as the opening ten minutes of *The Bat Whispers* is crammed with arresting visuals, so is the opening reel of the 1926 version packed with unique imagery. It tells the same story, of course, but the treatment is wholly different. The titles alone are a surprise, with main titles and production credits

etched in a series of metallic plaques. The list of players is presented as a crawl, which is most unusual for the period. "Can You Keep a Secret?" the picture patron is asked at the start, beseeched not to reveal the villain's identity to future patrons and thereby spoil their pleasure.

The first shot proper fades in with two glowing spots that are slowly revealed as the burning eyes of a stylized, grotesque bat, fangs bared and huge wings spread. We dissolve to a superb Ned Mann miniature of a stylized city at night under the baleful gaze of a full moon. A lone bat hovers, circles the skyscraper, then alights on the rooftop. Inside the penthouse apartment we discover the sinister millionaire Gideon Bell, swathed in black, alone in his palatial chambers. Huge candlesticks flank Bell at his desk, while the moonlit cityscape is seen beyond the multiple glass panes of two dramatic picture windows. As the villain murders Bell and steals the Favre Emeralds, cameraman Arthur Edson, ASC, imbues the room with a distorted sense of moonlight, invoked again during *The Bat's* flight across the rooftop as he skirts demonically past a huge frosted glass skylight. The moon is a motif throughout; the subsequent robbery at the Oakdale Bank is presented in another glorious Mann miniature under the baleful moon. Edson's camera is shooting past the silhouette of a scraggly tree as again, a lone bat circles in the sky and descends to the roof of the bank. The supernatural effect is complete as we cut to the real bat at the bank's skylight, delving into a devilish array of tools from his kit to select the precise instruments to accomplish his heist.

The Bat is more literal and hideous than he ever appeared on stage or in subsequent films. On stage his disguise was merely a black handkerchief; here he is outfitted with a literal bat's head with fangs and long upswept ears bristling with fur, and endowed with the unbridled energy of a demon.

Unlike *The Bat Whispers*, there is not a single camera move in the entire film. Some of it becomes stagebound, as is to be expected, but the film's major attributes are masterful art direction by William Cameron Menzies and impeccable photography by Arthur Edson, ASC, who was assisted by Gregg Toland, ASC. The Fleming Mansion proves to be mock-Tudor in its exteriors and passionately '20s Art Nouveau in its interiors, but the eccentricity of the rooms with their 18-foot-high doors and harsh black pools of shadow take us finally to the genuine "old dark house" realm, as do the back-lit, grime-encrusted window panes of the cobweb-festooned trunk room where *The Bat* prowls. Edson maintains throughout the delicate quality of moonlight pouring into the large rooms. The night exteriors of the ominously sculpted gardens of the estate are genuinely nightmarish when we catch a glimpse of *The Bat* lolling hideously on an outstretched tree branch, patiently waiting for a victim to pass beneath.

West's major failing was as a director of actors. His forte was the manipulation of light and shadow. In

one shot the creature's shadow takes on life of its own and closes a door, pointing the way to West's most distinguished use of shadows in *The Bat Whispers* and *Corsair*. Stage space and darkness are used profitably in the sequence where Detective Anderson is attacked by Dr. Wells. West shoots this as a single take in long shot with the detective sitting downstage in the study while the angle affords us a view through the doorway into two rooms upstage. Dr. Wells appears on the staircase in the farthest room and upon reaching the landing snaps off the light. There is a beat or two before he skulks from the blackness and pauses in the second room, again extinguishing the light. A longer pause, then he emerges into the study and switches off that light. Moonlight streams into the room from the tall window, and as Anderson looks about, startled, the Doctor slinks up from behind into the moonbeams and bludgeons the detective. A sequence like this probably would not work in a sound film; in the dream-like realm of silent film it sums up the basic sensation of a nightmare: something advancing upon the dreamer, sensed but unseen and moving in darkness to bring him harm.

The performances are a checkerboard, with only Emily Fitzroy as the spinster and Louise Fazenda as the maid really shining with the material. Most unfortunate is the colorless casting of stage singer Tullio Carminati, a Dalmatian count, as the ersatz detective. Perhaps one is spoiled by Chester Morris' crazily overblown portrayal in the 1930 film; his villain seems almost *more* dangerous once unmasked! Carminati is so perfunctory and bland that it is hard to credit his detective with the nerve, agility or wit to pull off The Bat's escapades.

But visually the film is quite fine. It is often strikingly composed and lit, turning to some of the silent medium's most decorative effects for climaxes (The Bat's dialogue gliding down his flashlight beam in an illustrated title card; red-tinted stock for the climactic fire, an effect West suggested using again in his screenplay for *The Bat Whispers*). Properly presented as an entertainment, not a "classic," *The Bat* is tremendous fun. The Cleveland premiere was blessed with a live organ accompaniment by Dennis James, who had the wit and facility to review the original 1926 cue sheet and compile as many relevant compositions as could be found, such as "Creepy Creeps" by Kilenyi. James' careful preparation and attention to visual cues was a welcome reminder of how much a silent film gains by the careful rendering of its musical accompaniment.

After the events at Cleveland, all that was needed was for the Magnifilm version of *The Bat Whispers* to debut, which it did on March 12th of this year at UCLA's Melnitz Theater as part of the UCLA Film and Television Archive's First Annual Festival of Preservation. William Bakewell, one of the picture's stars, was on hand to address an SRO audience with his recollections of Roland West and the making of the picture:

"We actors had no idea it was being shot in widescreen – we were confused enough filming all



Stylish night lighting by Arthur Edeson. Top: the Bat, on a limb, awaits his victim. Center: Jack Pickford in the estate grounds. Bottom: The Bat prowls in the secret room.

through the night, from 7 p.m. to 7 a.m. – West felt he did his best work during those hours! He was a taciturn, bandy-legged, stocky little guy. He'd call for action, then turn on his heel and walk off into the back of the stage. He'd listen to the dialogue, and call "cut" at the end of a scene. But he never watched a scene being taken. He was much more concerned with shadows and visual effects than he was with actors."

Magnifilm frames from *The Bat Whispers*. (1) Main title. (2) Shadow of the Bat hovers over car of fleeing robber. (3) Unusual two-shot of Charles Dow Clark and Chester Morris, designed for 2:1 ratio. (4) Gustav von Seyffertitz and Morris. (5) *The Bat* unmasked.



It can only be hoped that all of Roland West's Bats will stretch their leathery wings and fly out for many more retrospectives. To paraphrase *The Bat* himself, they've paid their respects to various cheap lock-ups and, having escaped their nitrate bonds, are ready

to provide modern audiences an opportunity to rediscover the talents of the forgotten Roland West.

Now, has anybody got *The Unknown Purple*?

Scott MacQueen works in Film & TV production in New York. His career article on Roland West appears in the book, *Between Action and Cut: Five American Directors*, published by Scarecrow Press.

The Bat (1926)

A Roland West production; produced by Feature Production, Inc.; distributed by United Artists Corporation; by Mary Roberts Rinehart and Avery Hopwood, from the stage play produced by Wagenhals and Kemper; adapted and directed by Roland West; continuity by Julien Josephson; photography by Arthur Edeson, ASC; settings by William Cameron Menzies; titles by George Marion Jr.; assistants on production, Frank Hall Crane, Thornton Freeland; film editor, Hal C. Kern; technical effects, Ned Herbert Mann; production executive, Joseph M. Schenck; assistant cameraman, Gregg Toland, ASC; production manager, Fred Stark; business manager, A.M. Brentinger; length 8219 feet; released March 15, 1926.

Players (as they appear): Gideon Bell, Andre de Beranger; Man in Black Mask, Charles Herzinger; Miss Cornelia Van Gorder, Emily Fitzroy; Lizzie Allen, Louise Fazenda; Richard Fleming, Arthur Houseman; Dr. Wells, Robert McKim; Brooks Bailey, Jack Pickford; Dale Ogden, Jewel Carmen; Billy, Sojin Kamiyama; Moletti, Tullio Carminati; Detective Anderson, Eddie Gribbon; *The Unknown*, Lee Shumway.

The Bat Whispers – Magnifilm (1930)

Produced by Feature Productions-Art Cinema Associates; released through United Artists; produced, directed and dialogued by Roland West; wide film photography, Robert H. Planck, ASC; supervisor of photography, Ray June, ASC; settings designed and executed by Paul Roe Crawley; film editors, James Smith, Hal C. Kern; sound technician, O. E. Lagerstrom; assistant director, Roger H. Heman; dialogue director, Charles H. Smith; in charge of sound, J. T. Reed; musical director, Hugo Riesenfeld; special effects, Ned Herbert Mann; production associate, Helen Hallett; make-up, S. E. Jennings; assistant cameraman, Stanley Cortez, ASC; special photography, Edward Colman, ASC, Harry Zech, ASC; special technicians, Charles Cline, William McClellan, Harvey Meyers, Thomas Lawless. Running time, 85 minutes; released November 13, 1926.

Players (in order of appearance): Police Lieutenant, Chance Ward; Mr. Bell, Richard Tucker; Butler, Wilson Bengie; Police Captain, De Witt Jennings; Police Sergeant, Sydney D'Albrook; Man in Black Mask, S. E. Jennings; Cornelia Van Gorder, Grayce Hampton; Lizzie Allen, Maude Eburne; Caretaker, Spencer Charters; Dale, Una Merkel; Brooks, William Bakewell; Dr. Venners, Gustav von Seyffertitz; Detective Anderson, Chester Morris; Richard Fleming, Hugh Huntley; Detective Jones, Charles Dow Clark; *The Unknown*, Ben Bard.

"RECENTLY I FIND MYSELF CHOOSING AGFA-XT AGAIN AND AGAIN!"



Photo By Barbara Cline

MICHAEL NORMAN Director — Emerald Films

Recent television commercials have included major banks, pharmaceutical corporations, business communication networks and national department store chains.

There are special challenges in making a good television commercial. Key among these is the look. As a commercial director I must not only capture a magical moment and tell a story, but must create a compelling visual, rich with texture and atmosphere.

Choosing the right film stock is very important. Recently I find myself choosing AGFA-XT again and again! The requirements for reproducing the grit and grime of an urban street scene are different from those of capturing the vibrant colors of a spring morning on a southern estate. Taking AGFA-XT into settings with unique lighting problems is a critical test of its ability to capture the subtleties inherent in each set-up.

With its precise color reproduction and high degree of exposure latitude, AGFA-XT delivers my point of view accurately. That's important to me because you only get 30 seconds. That 30 seconds must be perfection!

AGFA-GEVAERT, INC. — Motion Picture Products Division

NJ (201) 440-2500 or NY (212) 971-0260

CA (213) 552-9622 or (415) 589-0700

AGFA and XT are registered trademarks of AGFA-GEVAERT, Antwerp/Leverkusen

They reflect the best of you: AGFA XT125® & XT320®
COLOR NEGATIVE FILMS.

AGFA

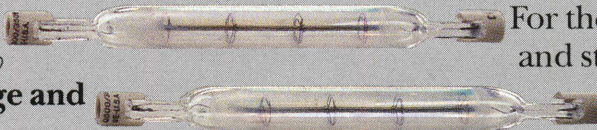


GE IS THE LIGHT THAT TAKES THE HEAT OFF THE PERFORMER



GE Lighting lights up the night while generating 35% less heat than ordinary stage and studio lights.

The pace is frantic. Five minutes to airtime. Late breaking news has just been handed in. As the countdown begins...the lights go on.



For the performers, ordinary stage and studio lights can be torturous because they generate much heat. That's why

GE invented the GE Watt-Miser Quartzline® lamp. This Quartzline lamp, with a revolutionary infrared reflecting coating, delivers 90% of



light of ordinary stage and studio lights while using up to 35% less wattage. It generates less heat, which means more comfortable working conditions for the people onstage and the people backstage. It also reduces the load on the air conditioning system and fits existing fixtures.

With features like these, it's not surprising that more and more people are using them. Because when what's onstage is hot, GE Lighting keeps it cool.

GE is Light.



GE Lighting



Photos by Jane O'Neal

Alien Nation – Buddy Film With a Twist

by Nora Lee

Produced by Gale Anne Hurd & Richard Kobritz
 Directed by Graham Baker
 Adam Greenberg, director of photography

It was a very good year for cinematographer Adam Greenberg – 1987. He shot three critically acclaimed films – *La Bamba*, *Three Men and a Baby* and *Near Dark*. Now, in the summer of 1988, 20th Century-Fox brings yet another example of Greenberg's work to the screen – *Alien Nation*. Produced by Gale Anne Hurd and Richard Kobritz and directed by Graham Baker, the film offers a story with an intriguing

premise – a buddy film with a twist.

It seems that, due to a malfunction, a shipload, a space shipload, that is, of aliens has arrived from another planet. They have begun a peaceful yet reluctant co-existence with their hosts. When a series of murders rocks the separate communities, a grudging truce is called by two cops – at least until the crimes are solved. The

alien cop is played by Mandy Patinkin and the human cop by James Caan. The story becomes a mixture of *In the Heat of the Night* and *Enemy Mine*.

Adam Greenberg liked the premise. With a musical, a comedy and a vampire movie behind him, he was ready for an action adventure with aliens. "Someone showed Gale and Graham *Near Dark*. I had no idea they would pick

me up. In fact, I was vacationing on the Dead Sea in a kibbutz (it was 125 degrees) and I got a call from Gale. That was the last thing to expect there," recalled Greenberg.

Greenberg is a second generation filmmaker originally from Poland. There, under the influence of the French New Wave, Greenberg took his lessons from the screen. "I learned it all watching movies. I grew up smelling them! And I jumped right into camera operating. All my life I have done all my own operating until *Three Men and a Baby*. I like it, but I could get used to using an operator. It has its advantages," he said with a smile.

From Poland, Greenberg emigrated to Israel. He worked many years there, primarily with producers Golan and Globus. His film credits list more than 80 films. For seven years he and his family have been in Hollywood. The decision to come here was not an easy one. "In Israel I moved up, but how far can you go? It is a small country. There aren't many opportunities and I was ambitious. So I said, 'the place to go is Hollywood.' I brought my wife and my kids and it has worked out very, very well for me. It was a big move, because I was well

established in Israel. At times it was strange and there are a lot of difficulties in being an immigrant. I had done some American movies in Israel and in Europe and that helped me."

Greenberg's first American assignment was Sam Fuller's *The Big Red One*, released in 1980. His biggest break and the film that put Gale Ann Hurd's name on everyone's lips was *Terminator*. It was Greenberg's first sci-fi film and *Alien Nation* is his second. "I've done love stories, musicals, war movies, intimate dramas, but in Europe they don't do the action picture like we do in America. You can have a small chase, but not cars crashing, explosions ripping through the film - they just don't do this," explained Greenberg. But action was only part of the challenge of this film.

"Each time I do a film, I am trying to do something specific. When I go into the movie I am very well prepared. I know what I am going to do. Two weeks ahead, I am very nervous. I can't sleep. I have pains in my head and stomach. But when I start the movie, it is like I have already seen it in my head. I have been to locations and I know where I'm going to put the key



Opposite page: *Alien dancer in ambiance of blue.* Above: *Caan and Patinkin in alien bar.* Below: *Caan and newcomer on the case in L.A. nightclub.*

light. I can tell you the stop I am going to use. So with each movie I am trying to create a certain atmosphere. I don't see the cinematographer standing by himself. His work must serve the movie. It doesn't make sense otherwise.

"So, when I began looking at the script for this movie, I saw a very documentary, straight look," said Greenberg. "I hoped to sell to the audience the idea that maybe this story could happen. That was my main thing. I didn't want the movie to look like a Hollywood movie. It needed a very hard look. The darks should be very dark. There's a big contrast between light and dark. I was looking for an overall cool look to the movie, too. I think it worked."

The documentary approach set the lighting style for the film and in Greenberg's words, "Hard was better." Hard lighting can be very unkind to make-up prosthesis and Greenberg knew it. Two weeks were spent doing various film and make-up tests before Stan Winston and his team and Greenberg were able to find just the right marriage of their separate technologies. Greenberg knew the lighting for the aliens could not be highly specialized. By the end of the two weeks of tests tensions were running high.

"The first ones were a disaster. They didn't look good at all. I didn't know how to photograph these aliens. It was the first time I had ever had to deal with this kind of thing. But I have an eye and I learned from these tests. But all the





Above: *Newcomer* discovers drug manufacturing location. Below: *Reference Stamp* portrays monstrous alien villain.

time we were testing there was a lot of pressure on me to use filters – just to make the tests look good! I didn't want to and I explained myself. 'I will come halfway,' I said, but using filters on the aliens will ruin the crisp hard look of the movie.' It was four days before we were to start shooting the movie and the aliens still didn't look good. I was determined that we would solve this problem before we started shooting. Finally on the last day, the tests looked good and everybody was satisfied.

"I found my way and I solved the problem with light. I didn't use any diffusion on the aliens or colored light. The key was the angle of the light. I learned where the problems were with the masks and adjusted the angle of the light to hide them. Sometimes it was very complicated and sometimes I made mistakes, but I learned," said Greenberg.

The aliens are humanoid creatures, not too different from their earthbound counterparts. But the make-up did involve full head masks. So there were seams to be aware of and the area around the eyes could give everything away if the lighting or camera angles were

wrong. To complicate matters, Patakin and Caan are police officers and partners in this tale. There are a lot of two shots that required Greenberg's full attention. Perhaps the most problems were encountered in the car.

Greenberg explained, "There was a lot of dialogue between Jimmy and Mandy in the car. We used a lot of car mounts. I would light the alien so that he looked good, but if he passed into a shadow while going down the street you could see all the seams in his make-up. So I sometimes had to block all the street lights with black paper. When I was in 100% control of the lights, I knew how to make the aliens look good. But at times it was a headache."

Almost the entire film was shot on locations in and around Los Angeles. There were only three weeks of studio shooting in the five-month schedule. Greenberg couldn't remember a single day-time shoot. The locations ran the gamut from San Pedro Harbor to Zuma Beach to a rough neighborhood in east Hollywood and the glamorous Biltmore Hotel. It was the historic Biltmore that taxed Greenberg's inventiveness.

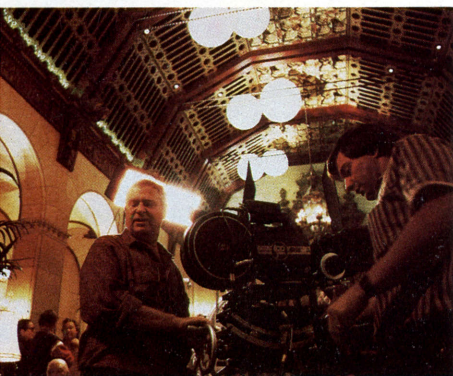
"I wanted a very rich look from that place, gold and very warm. In the story it is very late after a big party. I wasn't going for any special effect, just nice light from lamps on the tables. The problem was, the hotel management wouldn't let us hang anything from the ceiling. In pre-production they had told us we could hang lights, but I didn't believe them. The ceilings there are very high and very beautiful. I said to my grip, Gene Kearney, and my gaffer, Jono Kouzouyan, 'Let's cover ourselves.'

"As it turned out, one day before the shoot they told us we couldn't hang anything. But already, I had been thinking what we could do. I thought maybe we could put up white balloons and bounce the light out of those balloons. It worked very well. Gene brought eight or ten large white balloons to the set and tied them down with a very fine nylon string and we bounced the light off them.

"What do you do? You always have to come up with something. You have to go with your instincts."

In the film there are two bars – one for the humans and one for the aliens. "Encounters" – the place where the humans gather to watch an alien exotic dancer – was a microcosmic example of Greenberg's lighting approach. It all began in pre-production.





"In meetings with the director, we decided to stylize the aliens just a little bit. We decided that since they were from another planet they would have a faintly different color. The first color choice was orange, but I said orange is not easily identified with a particular person. Many scenes in a movie are shot in orange anyway. You have to give them some other strange color if you want it to be identified with the aliens, otherwise it will confuse the audience. We ended up with very deep, strong blue – a sort of moonlight blue. We tried to do all the scenes in the movie that appear to be their places heavily favored by this deep blue color. The Encounters Club was one of those places.

"The set was designed well. It was a very graphic set with a lot of straight lines. I chose to light most of it with fluorescent lights with the moonlight blue gels on top of them. The simple straight lines and the color fit in well with the design. I used them to light the entire scene except when the dancer was dancing. I wanted to have a strong backlight on the dancer's body to emphasize the transparency of her clothes. The only other light was a mirror ball.

"The light I used on the mirror ball was not blue. I didn't want the dancer to have blue in her face. Blue tends to make people look very hard and for the scene of this alien woman, I wanted her to look very nice, very sympathetic – a soft woman at this stage. So the front fill was not blue," recalled Greenberg.

Lighting challenges abounded in this film. Since almost

every scene was shot at night, Greenberg had to pull every trick out of his rabbit hat and invent a few new ones. One sequence that had him stumped for quite some time was shot down in the San Pedro Harbor area. "For some reason the director and the production designer picked a location in San Pedro that was two miles long and ended in a bridge. The problem was it was totally dark. Not even one light! One side is an oil field and the other side is a railroad and above the railroad is a freeway. There is no place to put lights.

"There were posts and I was thinking maybe we could hang some lights from them, but we couldn't because they were actually high tension lines. My gaffer Jono and I had to light two miles of set with what? We ended up with ten Condors and five generators. We snuck the Condors in wherever we could. We needed more than a single source. It was important to see everything in the two miles. It was a big project."

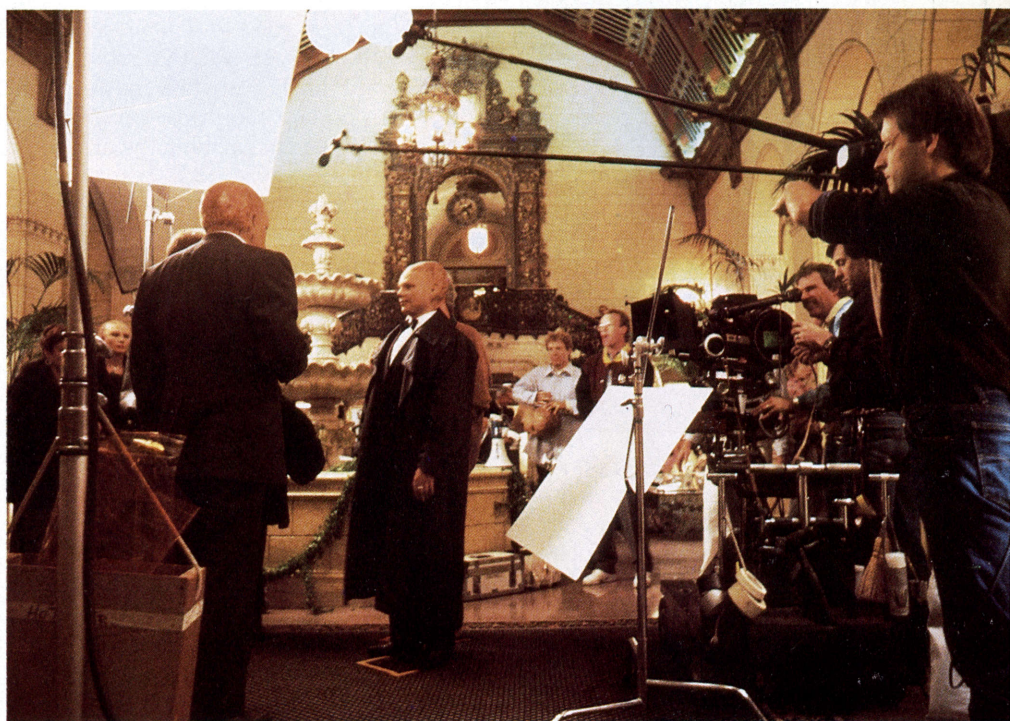
One of Greenberg's favorite effects was accomplished with the simplest lighting technique available. "There was one scene we shot that I thought was very nice. We had a scene on Zuma Beach

where the bad guys are dragging somebody into the ocean. I wanted to have a very hard, but very natural, and strong look. So, I used the car headlights. It was nice because everything behind the villains fell into darkness. It had a surrealistic look."

Greenberg used Arriflex cameras for this film and he chose Fuji stock. In fact, Greenberg has used Fuji stock on his last three or four films. "Usually I choose the stock for a certain look, but there is another consideration, too. When you see the movie in the cinema, you don't see a print from the original negative. You see a third or fourth generation print. So it is very important to keep in mind the grain and contrast in your original film. I have found that Fuji is less grainy. *Alien Nation* will be 70mm and it is also Super 35. I figured out from tests that it is better for me to use Fuji. Once film is blown up to 70mm the grain will stand out more and Fuji has smaller grain than Kodak. I can control the contrast with light, but I have to live with the grain."

Greenberg chose prime Zeiss lenses for every scene except one. Only once did he use a zoom lens and it was for the last scene in

Left: Weather balloons were used for bounce lighting in the L.A. Biltmore Hotel because of the high ceilings. Below: Crew works on alien scene.





Above: *Night for night shooting on the docks at San Pedro.* Right: Cinematographer Greenberg.



the movie. "Graham first wanted just a pull back, but it didn't work. So we combined a dolly move with the zoom and it looked better. But normally I don't like to use zooms."

Another decision that Greenberg made was to use multiple cameras. He explains why: "Photographically, of course, one

camera is best. But as a movie maker, and because I want the film to be a success, I realize that the photography is not the most important thing. The whole movie is most important. So in pre-production, I was the one pushing the director to always shoot with two or three cameras. I knew this kind of movie must have a lot of coverage and wider shots and sometimes it is hard to tell what will work best."

Probably the most important and least talked about collaboration in the movie business is the one between the cinematographer and the lab. Greenberg was naturally very particular about the look of this film. Night shooting, aliens, blue lights, the hard edge that he sought can be beautifully enhanced or totally eliminated through a misunderstanding in the lab. "In a movie like this I wanted the blacks to be very black, so I worked closely with DeLuxe lab to make sure that

with all this night shooting we got the right look, and it turned out well."

The daily challenges, the problem solving, the variety of situations – these are what make cinematography appealing to Adam Greenberg, and those things affect his choice of projects. For instance, he had just finished a long stint on stage shooting *Three Men and a Baby*. The locations and night shooting have visibly enhanced the appeal of *Alien Nation*. "I like to shoot in the studio as long as it's not for too long. I like the challenge of locations, but more than that, I like to shoot at night. I don't like to live at night, sometimes I start to feel like a vampire, but as a cameraman, you can create a lot more at night. Sometimes you have to feel your way. You also have true control at night. If a light is on it is because you turned it on." △

Designing an Alien Nation

by George Turner

Last November, while *Alien Nation* was in production under its working title, *Outer Heat*, production designer Jack Collis took time out to talk about his contributions to the highly unusual picture.

Born in Los Angeles, the soft-spoken artist studied architecture at USC and entered the motion picture field at MGM, where he worked on some of the big Technicolor musicals. His more recent credits as a production designer include *The Long Riders*, *Magnum Force*, *Cocoon*, *Star Trek IV: The Voyage Home*, and *The Running Man*. He received an Academy nomination for *The Last Tycoon*.

Between takes of an exotic dance sequence being filmed in a Hollywood night club, Collis explained that most of the picture was being filmed at practical exterior and interior locations in Los Angeles, many of which were enhanced to suit the needs of the story. Studio sets were constructed on stages at Twentieth Century Fox to accommodate the few scenes that couldn't be filmed on location.

An action sequence photographed in the harbor at San Pedro, for example, contains some stunt scenes that required controlled conditions more suited to studio work. The scenes involve helicopters, a tugboat, and fishing boats.

"We'll get our close shots in a tank on the stage with the stunt people," Collis said. "The practicals were shot just inside the breakwater, near the prison compound. Tanks are very limited these days. We had trouble getting the one we wanted, so we decided to build our own. It's about 44 feet in length and 22 feet wide with a big skirt around it. We'll have a big electrical block



and fall running on an I-beam the length of the tank, so we can hook our helicopter to that unit, raise it electrically from the floor and move it wherever we want to position it for the camera. We'll put a couple of other block and falls up there, lighter but working in the same fashion, to hold a fan for the effect of the rotor blades splashing the water out and another fan for the stunt man when he is hanging onto the skids of the chopper.

"We get the wake of a boat that's having problems and going out to sea by putting down a couple of 75 horsepower motors to churn the water up and give some life to it. As you actually see what you can get on the actual location, then you can do a little ad-libbing or enhancing when you get on the stage, if you have to have rollers or rockers or whatever might be needed to

match what you've shot down at the port."

Many of the locations had to be altered to give the appearance of places occupied by aliens from another planet.

"The idea was to bring in this alien group, assimilate them into our society, and get them a locale that would be part of Los Angeles," Collis explained. In the film they have gradually but rather grudgingly become accepted and are now known as "newcomers." They live in a barrio-like area called Slagtown. "It would look almost as if a group of Koreans or Vietnamese that had moved into the area. This group would have established their own community. They have their own language, their own signs. We helped that along by installing a lot of signs along Western Avenue and Santa Monica Boulevard so that

*Night for night
filming at suburban
taco stand.*



In a tank inside a sound stage especially built for the sequence at 20th Century Fox. Wind machine simulates effect of helicopter on the water.

they appear to have their own stores and shops, but still it's a mix of present day shops."

Colored drawings were made of all the stores on both sides of the street for two full blocks. Painted and electrical signs were designed for each building – graffiti, even, was carefully planned. The windows of one long building had been replaced with plywood, with the result that at night the structure photographed as a black void. Arrangements were made with the owner to replace the glass so the building could be lighted for night. Because some of the owners were dubious about the excessive electricity needed for the studio lights, Collis had separate fluorescent lights installed and placed the electrical connections outside to be hooked up by studio electricians. "I tried to avoid having to replace all the painting that was on the buildings but to tie our work with what already was there," Collis said.

The Hawthorns, a well-known family of sign painters, made most of the signs. "We had a whole stage filled with signs and Hawthorns at one time," Collis added. "We also had to do some painting at the location. Along with

lighted signs we put awnings on the trophy shop. Awnings gave it some shape and allowed Adam to hide lights under the awnings. We took a big, blank wall and put our own graffiti on it. On most of the stores where we put graffiti the owners said they liked it and wouldn't let us take it down! They said they didn't care if no one can read it, just leave it there! When you look at the sets you're not aware of all the work it took to give them the alien look.

"We had some big traffic jams on Western. We were limited to working hours like 9 p.m. to 6 a.m. With so much night photography I had to work very closely with Adam because he has certain requirements. For instance, he wants natural light as far as he can get it, or something that looks as if it's being lit from the source of the light itself. He does beautiful night work, because he never makes you conscious that there's a big arc outside. It all blends so that you're never conscious of the lights except the source lights, so we put as many source lights in as possible. We create the areas that we're going to need them in, whether it be floods or neons, and try to get a balance."

Collis pointed out the nightclub interior set as a notable case of adapting an existing location into an appropriate place to stage an exotic dance sequence, featuring Leslie Bevis as a beautiful alien dancer. The site is the Club Hollywood on Hollywood Boulevard. In a more glamorous time it was the famed Seven Seas; for the picture it was renamed the Encounters Club. "We made a very flashy, sophisticated club out of what was a nondescript place. The difference was in the mirrors we put in, the material in which we wrapped the columns, and the blue light – indicative of the alien type of light – which we used wherever we could put in a blue lamp. We went with vertical blue lamps on the columns and a lot of blue neon and we're carrying this through in other parts of the picture.

Collis revealed that he and the director originally intended to do more with the lighting in the nightclub and make some additional shots. "For example, I built a platform that Leslie was going to dance on, and my thought was to light the platform up so that as she walked down the steps the lights would come on in sequence. We put fluorescent light tables where there were stand-up bars so there was an upward glow. Half the battle is to know where to put the light sources.

"For the background, Jim Duffy, the decorator, found some black Austrian drapes that you could see through, almost like net – very voluptuous! What we were after was movement behind the drapes. We found some shiny, silver mylar, and by separating it we could get colored lights on the sides. I described the shot to Adam and he liked the idea. When we first saw it the mylar was hanging stiffly, and he asked how we could get movement into it. I said we'd put two fans down below that would keep it sparkling all the time. It became a very effective background for the dancer."

A blue color was maintained as a motif for the alien neighborhoods. "Instead of the usual



Left: Alien gunmen shoot up convenience store. Below: Night for night street shoot in Los Angeles neighborhood.

street lights we have poles with fluorescent fixtures on them, so that we have a whole series of blue lamps going into the distance. This gives a nice look to the picture and creates a mood." Even the alphabet of the alien citizens had to be designed as an integral part of their environment.

"We came up with individual alphabets and then combined them into certain words like, say, 'enter' and 'open,' so that we could repeat them," Collis recalled. "Gradually we created the kind of design we wanted, a flowing design more like hand writing than lettering, that looks almost like a heartbeat graph. Occasionally, we'd underline it as though it came from some sort of electronic machine, like an IBM report. It turned out to be such a simple thing once we got it going, but we had to go through a process of 'what is this going to look like?' before we got what we wanted. Also, it had to look like the *sound* of the language. We even brought in a language expert to give us something the actors



could be comfortable with. It became a rather important part of the picture.

"In some ways the picture is reminiscent of the work I did in *Cocoon*," Collis noted. "We pick up ideas from every show we've ever done, things that have been successful, and *Cocoon* was a fun show!

We had to design that pool house, which didn't exist at the location in Florida, and rebuild the pool so that we did have a practical solution to it. We had the equipment here and you can't always find it on location, so we built modular units here and shipped them down there and assembled it all there. I sent a truck-

O'Connor
CAMERA SUPPORT SYSTEMS

MODEL 127A

- Free-floating column
- Adjustable counterbalance
- Position readout
- 120 lb. capacity

Shown with O'Connor Model
100C Fluid Head



A E R O P E D

State-of-the-art...portable studio pedestal
designed and manufactured by the people
who created the first true fluid head over 35
years ago.



MADE IN THE
USA

O'Connor Engineering Labs
100 Kalmus Drive • Costa Mesa, CA 92626 • (714) 979-3993

FIRST IN THE WORLD

ARRI-COMPATIBLE FRIES MODIFIED MITCHELL CAMERA BODY

FIRST IN AMERICA

12 MM T2.1 PL ZEISS WIDE ANGLE PRIME LENS

FIRST OUTSIDE HOLLYWOOD

25-250 MM T2.3 TECHNOVISION-COOKE ZOOM LENS

FIRST IN SAN FRANCISCO

FIRST ARRIFLEX 35 BL FOUR CAMERA BODY
FIRST CEI VIEWPOINT VIDEO ASSIST SYSTEM
FIRST NORRIS INTERVALOMETER SYSTEM
FIRST JURGEN ORIENTABLE VIDEO DOOR
FIRST ARRIFLEX 35 BL III CAMERA BODY
FIRST MICRO FORCE ZOOM CONTROL
FIRST COOKE VAROTAL 5-1 ZOOM LENS
FIRST COOKE VAROTAL 10-1 ZOOM LENS
FIRST CEI VP II VIDEO ASSIST CAMERA
FIRST ZEISS CLOSE FOCUS LENS SET
FIRST ARRI III 1000 FT MAGAZINES
FIRST SACHTLER 7 + 7 STUDIO HEAD
FIRST ARRIFLEX IIC PL HARD FRONT
FIRST ZEISS 40-100 T2 ZOOM LENS
FIRST WILSON SUPAFROST FILTERS
FIRST PRECISION SPEED CONTROL
FIRST NIKKOR 200 MM T2 PL LENS
FIRST ARRIFLEX HI SPEED 46 SR
FIRST ARRIFLEX 35 III CAMERA
FIRST ZEISS 40 MM MACRO LENS
FIRST CANON 300 MM PL LENS
FIRST CANON 400 MM PL LENS
FIRST CANON 800 MM LENS
FIRST CANON 44 MM PL LENS
FIRST 150-400 MM PL LENS

CAMERA RENTALS



INCORPORATED
LEE UTTERBACH

151 KING STREET, SAN FRANCISCO, CA 94107, TEL. 415-974-1982, FAX. 415-541-9365

load of palm trees from here and set them around the building because there were none of the big palms I wanted on the estate except in the wrong spots. That gave us our Florida look. Don Peterman was the cinematographer on that – he and I have done several pictures together – and we're always interested in where the source of the light is and what's the natural look to the thing. That's what gives it realism."

Collis emphasized repeatedly that *Alien Nation* is not a "space epic" but a down-to-earth action story. "We did build a spaceship, but it's a simple thing that you see on a TV monitor describing the landing of the aliens several years ago, before they became assimilated into our society. It gives a background but not a lot of detail, and the people themselves, with the makeup that Stan Winston designed, had to be enough like human beings that you wouldn't think of them as fearsome space monsters. They would be next door neighbors, or somebody you're working with, and therefore they had to have human characteristics – yet, they had to look 'alien.' There's a very fine line there. With all the changes they still are able to express the natural emotions.

"The 'newcomer' dancing girl was a tough make-up job. On the first go-around she wasn't that pretty, and she had to have a voluptuous, sexy quality that we see in the nightclub during her dance; you have to be intrigued. So Stan went back to the work table and redesigned her and she proved to be a very interesting and attractive alien."

The nightclub set on Hollywood Boulevard has an upper story where action occurs in Cassandra's dressing room, a couple of offices, and a big conference room where the heavy – Terence Stamp – and his cronies try to make a drug deal. These were built on Stage 19 at the studio. Collis described the utilization of the sets, which were unfinished at the time of the interview.

"We'll have the girl exit up the stairs and Jimmy Caan and

MOTION CONTROL PHOTOGRAPHY

MODELS/MINIATURES

ADVANCED BLUESCREEN TECHNIQUES

MECHANICAL EFX

ANIMATION

LASER EFX

PROSTHETICS

PYROTECHNICS

OPTICAL COMPOSITES

A P O G E E

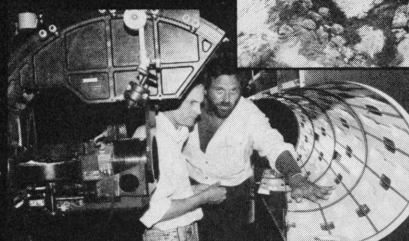
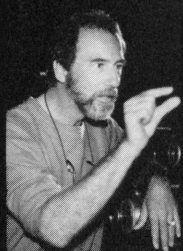
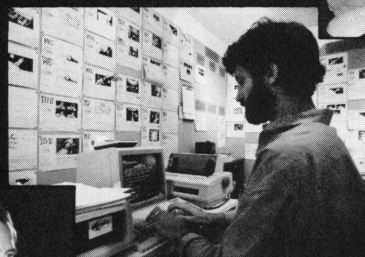
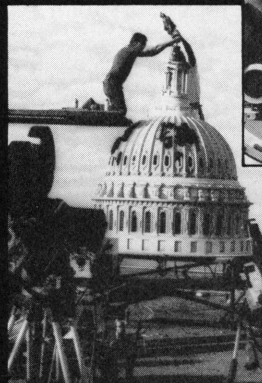
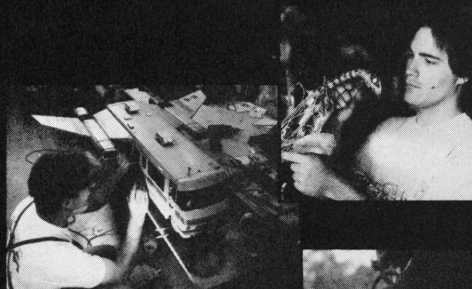
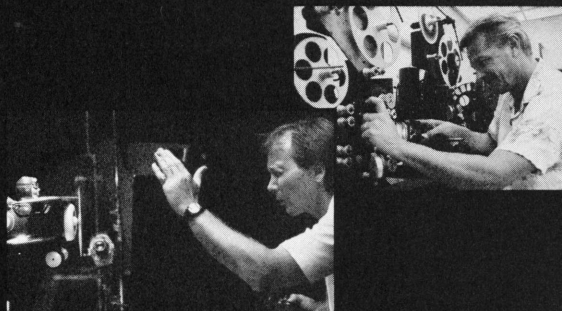
PRODUCTIONS

6842 VALJEAN AVE.

VAN NUYS, CA 91406

818.989.5757

FAX: 818.781.6671





RECOGNIZED,
FOR
OVER 65 YEARS,
AS THE
STANDARD OF
EXCELLENCE
FOR
MOTION PICTURE
AND
TELEVISION
TITLES
AND
OPTICAL EFFECTS

213-464-0121

Mandy Patinkin will follow her up the stairs and down the corridor to her dressing room. There's a lot of action in the corridor, where we have somebody running to escape, and another scene in front of the door with the camera inside the door, shooting out. This matches the club area so that when we come upstairs we know what the configuration is. The dressing room is supposed to be a made-over women's lounge, so she will have a bed and dressing table but there will also be lavatories and marble toilet stalls."

Indicating a tile effect being applied to floor and walls, he explained: "We'll grout all this and age it down. It will be as if it had been remodeled sometime in the past. The offices will have file cabinets and desks and they'll be messy. One room will be darker, with a light globe in one area and a hard ceiling. We'll have some fluorescent fixtures that we can turn on and we'll have desk lamps, but it will be subdued light that we'll be able to pick up through the blinds. As the detective comes through he will walk past the windows; he hears an intercom and Cassandra's voice from the other room. He gets jumped and the fight is on. And then the alien he's after makes his escape down the corridor and out the door.

"At the Encounters Club we had one shot of people crossing in front of the bar, then we panned up to the window area and there was a man standing there, who turned and walked away. We'll pick him up on the upstairs studio set. I'll drape it with black outside, put up a couple of columns and we'll have some theatrical light sources. He'll turn and walk into the conference room, which will be very dark. There'll be tables and table lamps, and I'll put track lights above the table, which will be about 20 feet long, so Adam can get his down-shots on the characters, and bathe the table in spots of light. We'll put in a hard ceiling, but no fluorescents, just lamplights – little spots."

Collis indicated some other sets that were being completed

on the same stage, taking form incongruously adjacent to the spectacular temple set which was still standing from *Big Trouble in Little China*. One set is a reproduction of the property room of a hospital morgue where location work was done earlier.

"We redesigned a kitchen and turned it into a morgue," Collis said. "We put tile board on the walls. I don't like normal tile board – it looks cheap, so we'll put a special paint job on it – spatter it up – and then go back and grout it in. We'll have the detectives coming through here, and I'll have backup walls in both of those areas because Adam wants to get light into the side. Once they've got that I'll remove those two walls, redress the area and put in a couple of walls to make it narrower and it will become a corridor leading to an elevator in the same building."

A bus stop set stood nearby. "We're going to set this up this afternoon in Van Nuys," Collis noted. "We have a scene at a little burrito stand and we put a lot of light sources there. There was a big wall we wanted to put graffiti on, but the owner wouldn't permit it, so I built a bus stop with graffiti painted on it. It gives a light source and we need that extra little bit of light for a close scene that we're playing with two people talking in a convertible. It makes the background busier and more interesting. We're going to put it near the burrito stand where it's dark. Adam can backlight it and there's an overhead light.

"We have a big church sequence coming up, a wedding scene, which we'll shoot down the street at Beverly Glen. Another key set is Bar X, which is basically a "newcomer" saloon. Downtown, we found Monty's, a nice, long bar, which is what we needed for the scene. The old-fashioned long bars are becoming difficult to find lately, and you really have to look for them in buildings that were built in the Twenties or earlier, when they used to have high ceilings. It has to have pool tables and has to look beat-up, which it will when we get through with it.

A SMALL SOLUTION TO A BIG PROBLEM.

I SEE YOU.



The Integrated Communications Unit I.C.U.

Think of it as a portable control room in your hands. Attractive and compact. Incorporating the options for a multi standard video receiver, enhanced resolution monitor, dual FM receiver, transceiver (walkie talkie) or cellular compatible telephone and a multi function time piece with time code, stopwatch, lapse timer, countdown clock...

Quite simply the answer to all your communications problems. The I.C.U. is the missing link. It's unbeatable!

If you would like more information call or write to us in London and one of our reps will be happy to demonstrate this unique new concept in communications.

I.C.U.[™]



10c Barclay Road, SW6 1PT. Telephone: 01-731 1091

For Immediate Reply, Fax Us On: 01-631 1952

We needed to make a narrow-looking bar without restricting ourselves so that we couldn't get the equipment in, so we put in some phony booths and walls. We added a series of translucent glass panels along one side and I'll put some lights behind them to give us some gray towards the bar. We'll have lights under the bar so that the whole floor is lit. We want it to be depressing and dangerous as it has to play in a very dark mood and be a scary place to go into. In the picture, Jimmy Caan as Detective Sikes goes there to try to deal with a rough newcomer."

Other practical locations included York Street police station interiors, the interior of Sikes's home (actually a house near the studio), Nichols Canyon Beach, the Los Angeles Police Academy, and Tommy's Burgers (a local landmark). Some Hollywood residential areas and a public school playground became part of the alien environment.

"There are street scenes where aliens are congregated on their porches, very much like families in a tenement district in New York," according to Collis. "We lighted these with fluorescents rather than our regular lights, to keep the alien look. We have to create an atmosphere so that, even though we don't put up a sign stating that this is an alien neighborhood, you certainly can tell when you look at it.

"The past two days we've been shooting at the Biltmore Hotel, where we had the alien villain – Terence Stamp – introduced to a very elite group of people. We did it in the Crystal Room, where our main problem was to find how we were going to light the tables in that area and what kind of lamps to use so that Adam felt comfortable with what he was getting.

"Adam did a very unusual thing last night, when we shot in the lobby. There's a tremendously tall ceiling, and the problem of getting lamps up that high is almost unheard of. He came up with an

ingenious idea: 'Let's send up weather balloons and I'll bounce the light off that.' So we put six or eight weather balloons up there. That also satisfied the hotel people, because they don't want a lot of spreader bars to contend with."

The most elaborately adapted practical set is a lab at the Anheuser-Busch plant. "It's supposed to look like a petroleum factory. Our heavy has taken over a part of it, the methane lab, and is using it for the manufacturing of a forbidden drug," Collis said. "We found an unused portion of one of the basements where they had huge steel tanks and it made an interesting background for us. We're going to build a platform set down there as though there's an overlook of this operation, and we built a special tri-tech table with translucent tubes running through as they're refining the drug. Everything will be done in white, aluminum, glazed blacks and blue. The alien cop finds the lab and he comes in here, walks the entire distance looking at it, and finally tests it. Then he starts breaking up the lab. We have special tubes that he can wrench out and break."

Using photographs he had made at the site, Collis indicated where lights and equipment would be deployed. "We're building the whole second floor so we can get our down shots. Our equipment will be set along the entire length of the building. We're putting in special doors and we have an approach to this room where we'll get some smoke effects and set up an interesting lighting situation as the men are approaching the lab. We'll build units so that the actors can appear to go into the office overlooking the lab."

Collis is enthusiastic about the production and pleased that he was able to work in partnership with the director of photography to create the unique visuals of *Alien Nation*. △

If You're In...

The Empire State.
The Old Dominion.
The Free State.
The Lone Star State.
The Prairie State.
The Garden State.
The Sunshine State.
The Tar Heel State.
The Peach State.
The Nutmeg State.
The Wolverine State.
The Buckeye State.
The Bay State.
The Land of 10,000
Lakes or anyplace
in between

...ZGC is your
exclusive source
for all Cooke
35mm lenses.

And no matter what state
you're in, we're your
exclusive source for Cooke
16mm Lenses. Contact
Les Zellan for a free
catalogue.

ZGC, Inc.
Cooke Lenses

Canon Video Lenses
57 Plymouth St., Montclair, NJ 07042
201-746-4428
TWX 9102508817

SEEN ONE,



TAKE ONE.

The new Cooke Wide Angle 14-70mm Varotal brings a new dimension to 35mm film making. It's horizontal angular field of view of 76° gives cinematographers the first true wide angle 5:1 zoom lens, offering exciting opportunities in artistic interpretation.

Excellent image quality is achieved through unique design and manufacturing techniques, enabling the highest performance to be maintained throughout the entire scale.

The Cooke Wide Angle Varotal also ensures high transmission, excellent colour rendition, minimum flare and maximum durability.

A sealed front unit ensures trouble-free operation in a variety of environments and the built-in isolator minimises camera noise projection.

Now, you can have Cooke 20-100mm performance with wide angle capability.

We feel once you've seen one, you'll take one.

THE • NEW • WIDE • ANGLE • ZOOM

Cooke

LEGENDARY QUALITY



Manufactured by Rank Taylor Hobson Limited – the home of Optical Excellence.

Rank Precision Industries Inc., 411 East Jarvis Avenue, Des Plaines, Illinois 60018 Tel: (312) 297 7720

WEST COAST CONTACT: Kish Sadhvani, Kish Optics Company, 2210 Wilshire Boulevard, Suite 868, Santa Monica, California 90403 Tel: (213) 454-9751

EAST OF ROCKYS CONTACT: Les Zellan, Z.G.C., 57 Plymouth Street, Montclair, NJ. 07042 Tel: (201) 746-4428

Cooke and Varotal are trademarks of Rank Taylor Hobson Limited

Modine and Michelle Pfeiffer. Cinematographer Fujimoto is in background to right.



Photos by Ken Regan

Married to the Mob — a Struggle to Escape

by Linda Lynton

Director Jonathan Demme's most recent film, *Married to the Mob*, is a comedy about life within the Mafia. It veers from straightforward slapstick to parody and centers around the life of Mob housewife Angela (played by Michelle Pfeiffer) who struggles to escape from her mafia-ruled existence. Tak Fujimoto, who

Produced by Ed Saxon and Kenny Utt
Directed by Jonathan Demme
Tak Fujimoto, director of photography

has worked on many films with Demme, was director of photography. Some of these films are *Something Wild*, *Melvin & Howard* and *Swing Shift*. He also photographed *Pretty in Pink* and *Ferris Bueller's Day Off*.

The story in *Married to the Mob* — it was written by Barry

Strugatz and Mark Burns — unfolds in three distinct locations: Long Island, Manhattan and Miami. According to Fujimoto, these locations "suggested a progressive transformation of the look of the film, and show the progression of Angela from a confused, frustrated housewife trapped in a life she finds repugnant, to a woman struggling to live on her own, independent, searching for self respect."

First, we see Angela becoming bored, then frustrated, with her passive materialistic existence in a Long Island suburb. It's a life surrounded by shopping expeditions to local malls, going to the hair salon and playing cards with other Mob wives. Once her husband is killed she decides to leave.

She finds herself an apartment on Manhattan's Lower East Side. However the Mob, in the person of the lecherous crime family boss, Tony Russo (played by Dean Stockwell) doesn't leave her alone. Angela acquires a job in a hair salon decorated in an extrovert Caribbean style, and she goes to a Caribbean dance where she plucks up the courage to pick up Mike (played by Matthew Modine). It is not until she has fallen in love with him that she discovers he is an FBI agent who is stalking her and her Mob connections.

The finale of the film takes place in Miami at a Mob convention where its leaders meet to discuss and settle territorial differences. There is a confrontation between the Mob bosses and the FBI which is further complicated by Russo's wife going on the rampage against her philandering husband. It is this scene, intensely colored and highly stylized, that sets the visual tone for the rest of the film. Fujimoto chose the lighting and color balances for other parts of the film in relation to that scene.

There are distinct, almost symbolic uses of color and light throughout the film, with red prominent in the sections dealing with the Mafia. Cooler, blue lighting is used in aspects of Angela's life away from the Mob. The film begins with predominately red light and ends at the cooler end of

the spectrum in the Miami penthouse which has mainly blue and green light.

"At the beginning of the film, where you see Mob hit men following a man onto a train, there is lots of red lighting," said Fujimoto. "It's the lighting and not the decor that lends a feeling of danger to the situation. The big scene in Miami is very different. There are greens and a riot of shades of blue. It's a gaudy room with a whole window section that is a water tank where bubbles rise from the floor to the ceiling.

"The most challenging part of the film was working out the color aspect," he continued. "I did not have a good handle on what I would do until we shot the murder on the train, which is at the beginning of the story. It was not shot in a realistic way. Two gangsters are trailing a bald man. The train goes into a tunnel and everything is black and the action is illuminated by flashing lights, which of course in real life would not happen. It was here that we had the idea of using red light to represent the gangsters, as it is used when the gun is held to the back of the man's head. Using red light to shoot the gangster scenes was not preplanned."

In the Long Island scenes Fujimoto "didn't use 85 gels on the windows, but let there be a contrast between the blue daylight and the rich ambers of the tungsten lighting from the fixtures in the rooms," he said. "For instance, in the salon where Angela has her hair done I didn't want to make the scenes naturalistic because, visually, the movie is very theatrical. I used the warm light from tungsten bulbs in some interior shots, while the light coming from the window is cold. This was an attempt to suggest the divided nature of Angela's life within the crime family. It probably sounds a little heavy-handed, but the script operates on so many different levels I hoped this approach would be dramatically appropriate," he said.

"Because the script falls into three different sections – Long Island, Manhattan and Miami – I worked with each section sep-

arately," he continued, "building up the intensity of the color to the finale in Miami. Miami was bright, colorful and tropical. I used Eastman Kodak 5247 film for both interior and exterior shots, in order to make it as colorful as I could."

The greatest problem with the main Miami scene, which has continuous action over some 15 minutes, was the weather. It changed hourly. "You'd get clouds, then full sun, then it would go black, then the clouds would break up. The light constantly changed, but the events in the room were meant to be taking place over about 15 minutes of real time. The scene took five to six days to shoot, so we needed consistency here.

"We used different lighting techniques, neutral density gels against the windows and netting across the balcony in order to even out some of the changes. When the sun was pouring through the windows we used silks across them to cut it out. It was a constant battle to maintain even lighting," he said.

"To emphasize the color aspects of the film, I used as much 5247 film stock as possible, for both interior and exterior shots, because it has a richer, more saturated look than 5294. But in the earlier sections of the movie I used a combination of 47 and 94 stock. I used the 5294 film stock in a somewhat unorthodox fashion, because this is a stock meant to be utilized for low light level night exteriors and low key interior scenes. I used it for bright, daylight exterior scenes, trying to take advantage of its flatter quality.

"In many instances of bright daylight, the 5247 stock seems to me to be a little too color saturated and contrasty, so I use the 5294 stock with its flatter quality to get a less contrasty look. Instead of using filters to control contrast, I switched film stocks. This method was used extensively in the Long Island and Manhattan sections of the film."

Because Manhattan is a much less colorful, and dirtier, city than Miami, Fujimoto and Zea tried to enhance the dour environment by using colorful sets that



Crew on location in New York working on scene with Matthew Modine.

were less saturated than the Miami ones. "The Manhattan environment was much less bright than Miami and Angela had a grubby, seedy apartment," he said. "But we did not want to make this environment look too gritty as she is changing her life. We wanted to show hope and expectation in these scenes. In order to counterbalance the grittiness of the city with her moods we used very bright lights. The lighting was much brighter than if we had been making this film realistically.

"For instance, Angela gets a job in a hairdressing salon that has Caribbean decor. The colors are bright primaries, as is the decor of the Caribbean dance where she asks Mike for a date. We were trying to make statements about the future, make it hopeful. Also, because a lot of Manhattan does look dirty, we picked places that have a sense of expectation about them. Even where we show her walking through crowded streets – a claustrophobic atmosphere – hinting at her depression while she's looking for a job, we've kept the lighting strong so the mood isn't too downbeat.

"However, there were times when we needed to show Angela's sense of depression. In order to capture these conflicting moods,

I used 5247 for the interior scenes which are bright and cheerful and 5294 for the more downbeat scenes in the streets. Even if the sun was out in the streets I used the 5294 because the light is flattened and you get an increased sense of her despairing mood," he said. "But there's never too much in the way of despair in Jonathan's movies, there's always something happening. All the support characters in his films are very idiosyncratic and this movie is no different."

One of the most outstanding visual features of the entire film is its theatricality. Apart from the symbolic use of color and light, Fujimoto uses even stronger theatrical methods. "Early on in the film, the Mafia chief has a rendezvous with a cocktail waitress, and we used red gels to make the scene more theatrical. We also heightened the theatricality by using unusual camera movements and angles. For instance, the cocktail waitress is having an affair with two Mob men, and they meet her in the same place but at different times. The camera tracks Russo approaching the motel

where he is meeting the waitress and suddenly it tilts over.

"Jonathan wanted a disorienting look to the frame, he didn't want the conventional dolly-ing along. The tilting frame gives a tension to the scene, a sense that something is going to happen. We added these angles in selected places in the movie to create tension at pivotal spots."

Another scene where the theatricality is heightened is where Angela confides to Mike about her life, and in a fit of despair says how she feels that it is hopeless, that she'll never escape the Mob. "She lies down on the bed," said Fujimoto, "and Mike walks into the bedroom. He turns off the light and the scene is completely black. Then a circle of light appears spotlighting them both on the bed. Obviously this lighting is not realistic at all."

As with the choice of lighting, the theatricality of the film was not preplanned. Demme and Fujimoto shot the film in script sequence "since it's easier to get an idea as to what the film is about that way," he said. "Most of the time

Jonathan likes to shoot in script order because if you do not have an exact idea of what it will look like, it gives you time to think of the direction the film is taking. With this story, once we realized that the direction was a theatrical one, it opened up a lot of ideas because we were not bound by reality. Every movie has a life of its own, a direction. Jonathan's willing to take a lot of risks."

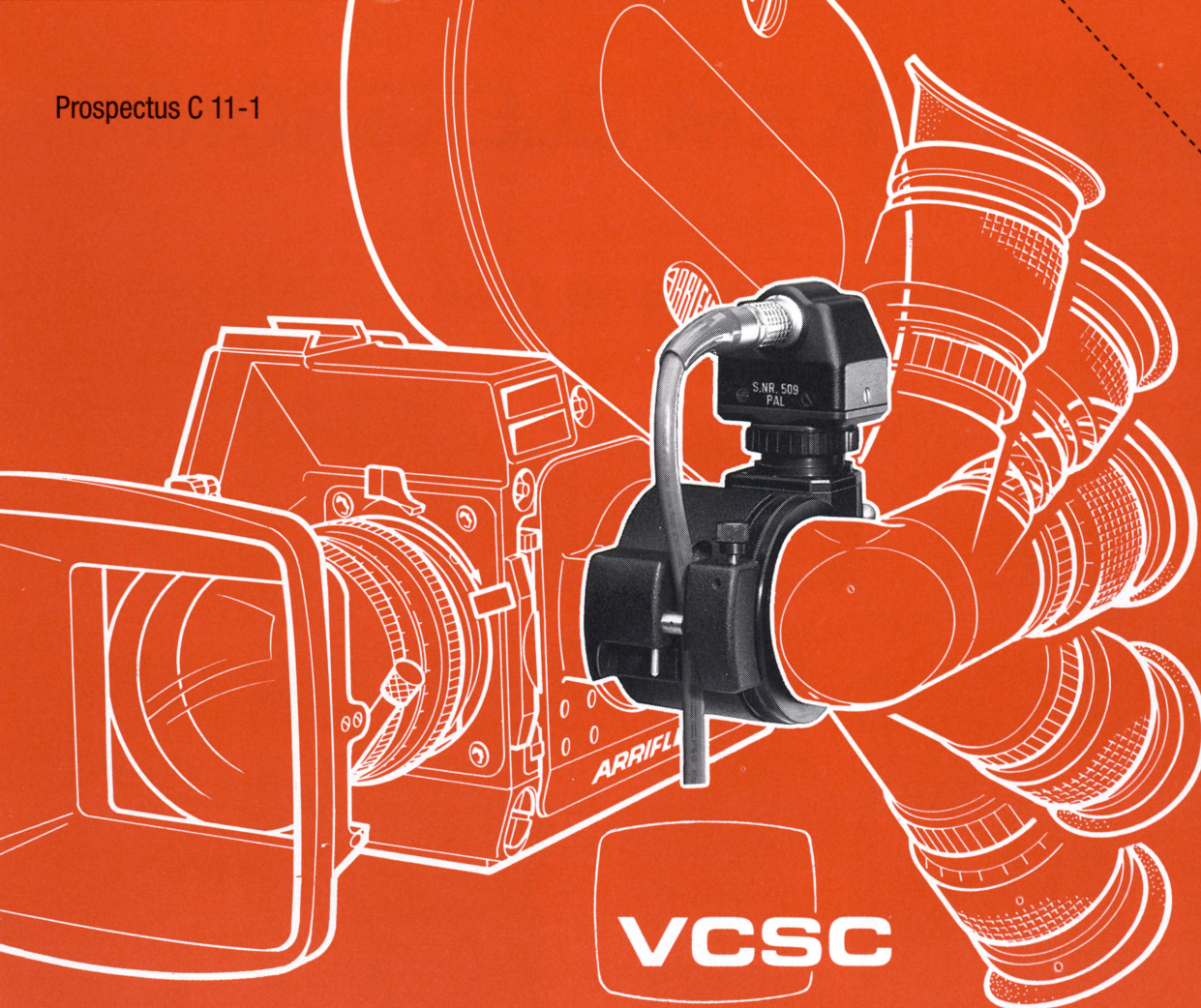
This almost *ad hoc* method of creating a production is enhanced by the atmosphere on the set. "The crew in New York was good; I liked all of them. It's really great working with Jonathan because he treats everybody like an equal. It's a very free and open set. Ideas come out of this situation because he encourages everyone to speak their minds, and he takes the good ideas. For instance, the key grip volunteered some dialogue that was used in the film.

"Jonathan definitely has his own style, and an individualistic outlook on filmmaking and people," Fujimoto concludes. △

New!
Available now:
The world's
smallest
b/w
VIDEO
CONTROL
SYSTEM

VCS

- Future-oriented functions, technology and design.
- With amplifier in the camera.
- Flicker-free at 25 fps/50 Hz.
- Camera sensitivity: 1 lux at F:1,4.
- The optical units can be used for both the VCS and VCS C.
- The VCS has the same advantages as the VCS C.

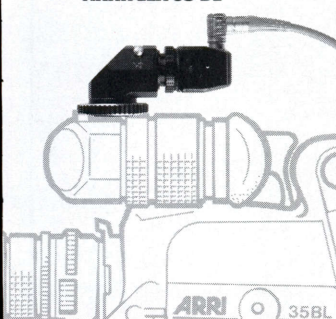


Full pivoting viewfinder
210°

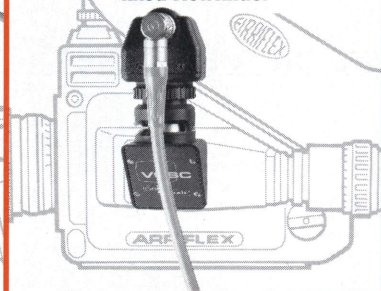
the world's smallest COLOR VIDEO CONTROL SYSTEM

VCSC Color video outcoupling **VCSC** Flicker-free at 25 FPS **VCSC** Camera head/video chip
with big advantages: high resolution, impact-resistant, no smearing effect, no burn-in picture, unlimited service life
VCSC With swing magnifier **VCSC** With fixed magnifier

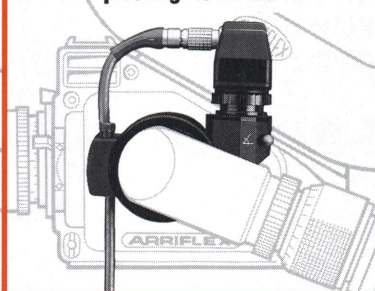
VCSC in connection with
ARRIFLEX 35 BL



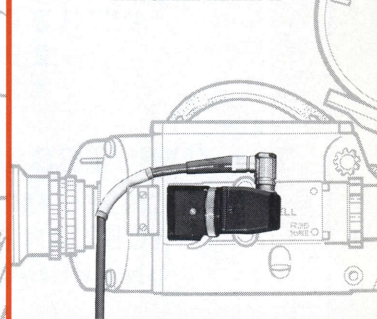
VCSC in connection with
ARRIFLEX 35 III with
fixed viewfinder



VCSC in connection with
ARRIFLEX 35 III with
pivoting viewfinder



VCSC in connection with
MITCHELL MARK II



PRÄZISIONS-ENTWICKLUNG DENZ

Josephsburgstr. 81-83 · D-8000 München 80 · West-Germany
Phone: (089) 431 6047 · Telex: 5-216 681 · Telefax: (089) 431 6967



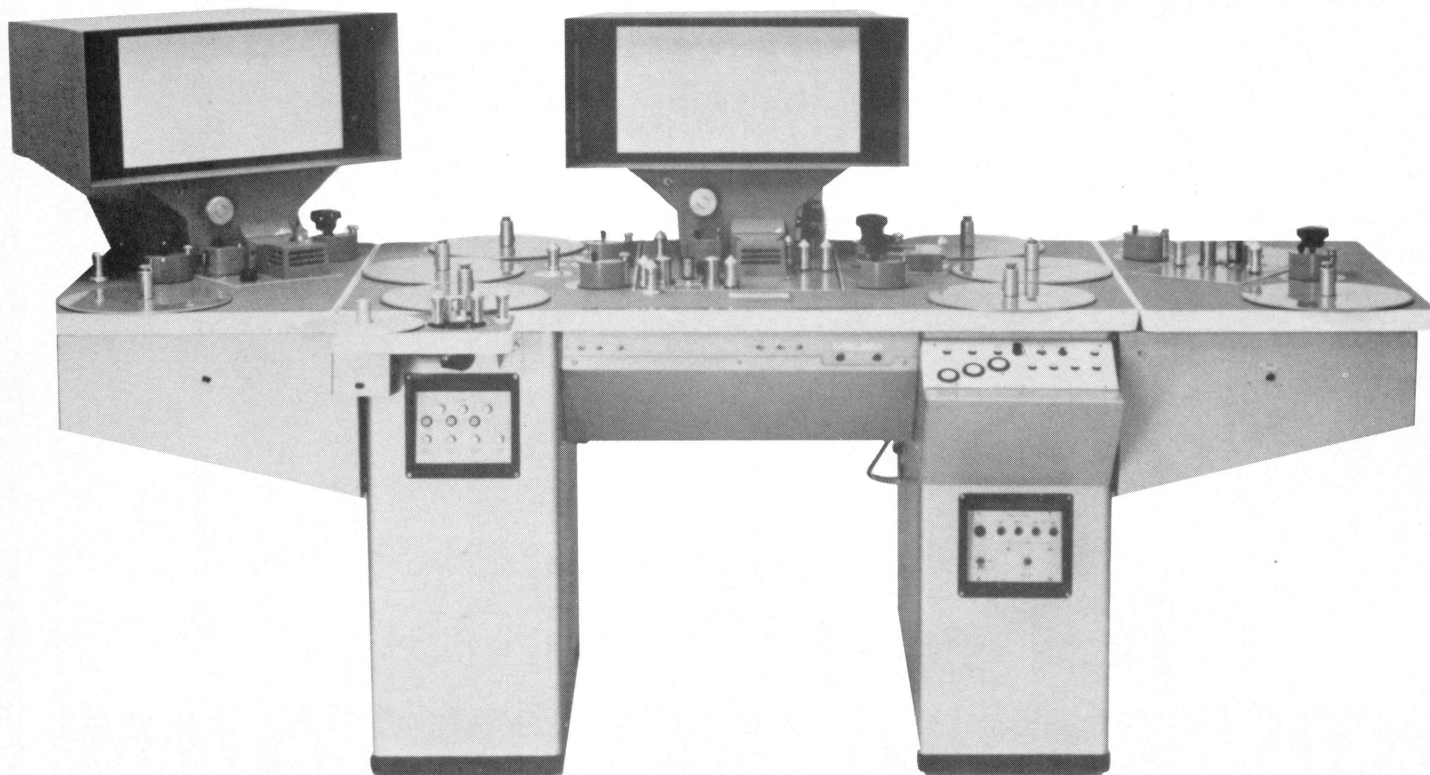
Representative for USA:
technological cinevideo services, inc.

SALES · RENTAL · SERVICE · 212-247-6517
630 NINTH AVENUE · 10TH FLOOR · NEW YORK, N.Y. 10036



KEM ELEKTRONIK

UNIVERSAL 6 / 8 1960



The UNIVERSAL 6 / 8

- * MORE THAN 25 YEARS ON THE MARKET
- * MORE THAN 1000 UNITS IN THE FIELD
- * WITH 3 PIX/1 SOUND
2 PIX/2 SOUND
1 PIX/3 SOUND-THE ONLY ONE ON THE MARKET

The UNIVERSAL 6 / 8

COSTS MONEY, BUT
YOU CAN MAKE MONEY, BECAUSE IT IS THE
UNIVERSAL.

KEM ELEKTRONIK MECHANIK GMBH

D 2000 Hamburg 54, Herlingsburg 16 • Telefon (040) 567665 und 567675 • Telex kemdt d 214657

UNIVERSAL 6 / 8 1986

The UNIVERSAL 6 / 8

- * WITH NEW ELECTRONIC DRIVE
- * MAINS AND CRYSTAL CONTROL
- * INTERLOCK TO OTHER UNITS INCLUDING VIDEO
- * 6 TIMES SOUND SPEEDS
- * NEW PLUG-IN MODULE: TV-SCANNER, CAMERA-HOLDER AND KEMSCOPE
- * WITH TRANSFER FACILITY FROM FILM TO VIDEO

UNIVERSAL EDITING SYSTEM WELL ACCEPTED BY MOVIE INDUSTRY.
MOST PRODUCTIONS IN USA CUT ON A "KEM!"



KEM ELEKTRONIK MECHANIK GMBH

D 2000 Hamburg 54, Herlingsburg 16 • Telefon (040) 567665 und 567675 • Telex kemdt d 214657



Photos by Bruce Birmelin and Sidney Baldwin

From Outer Space, *They Live*

by David Heuring

Produced by Larry Franco
Directed by John Carpenter
Gary Kibbe, director of photography

John Carpenter makes movies that are out of the ordinary. Leave it to a filmmaker whose subjects have included a haunted car (*Christine*) and the island of Manhattan as a futuristic prison (*Escape From New York*) to come up with this one: evil free enterprisers from outer space starring with a former pro wrestler.

In his latest film, *They Live*, John Carpenter brings his unusual type of social commentary to the subjects of subliminal seduction through media, and the growing homeless population. The story turns the tables on exploitative first world societies by making Earth a "third world" planet, exploited by

aliens who use the mass media to gain control. Posing as successful humans, the aliens corrupt the greedy to their cause, and control the rest through subliminal messages in the media. If allowed to continue, the aliens would deplete all natural and human resources, discard the earth like so much trash, and move on to another planet. John Nada, played by former pro wrestler Roddy Piper, slowly uncovers the insidious plot. He joins the underground movement, which is based in the ever-growing tent city for the homeless, Justiceville.

"*They Live* began three

years ago with a comic book I bought called 'Nada'," recalls Carpenter. "It was published by Eclipse Comics, a company which puts out very beautifully rendered science fiction stories. This particular strip was taken from a short story called 'Eight O'Clock in the Morning' by Ray Nelson. In the story, this guy wakes up and realizes that the entire human race has been hypnotized, and that there are creatures among us. I became entranced with the story, but I felt that it should be updated. I thought that it might be more current if the guy woke up and realized that the Reagan Revolution was run by

aliens from another planet."

This eccentric, yet topical premise remained a seed in Carpenter's fertile imagination while he made *Prince of Darkness*. But when Carpenter paid a recreational visit to Wrestlemania III, the seed germinated. There he met "Rowdy" Roddy Piper, professional wrestler and future star of *They Live*.

"My idea of a male hero is based on a person, a very close friend of mine, that I knew when I was growing up," says Carpenter. "Many of the heroes in my movies – Kurt Russell's character in *Escape From New York*, Jeff Bridges' character in *Starman* – have this person's qualities in one way or another. When I met Roddy Piper, I felt that he also had these qualities. He looks as if he's lived life, as opposed to looking like a glamorous Hollywood movie star. He has a rough face, with scars from his fights, but it's a kind face. I thought it would be a different point of view to use him as the leading character in this story. So finally it coalesced for me. I took the Ray Nelson story, added the political commentary and wove Roddy Piper in as Nada." The resulting screenplay incorporates many elements, including science fiction, action, comedy and political satire. However, Carpenter emphasizes that it is not a horror movie.

Carpenter's choice for cinematographer was Gary Kibbe. "I learned the camera when I went to USC film school," Carpenter recalls. "I shot a lot of film, and spent a lot of time with the ASC manual, so I generally know what's going on with the lenses and the camera. But there is no way I would consider myself a cameraman. Working with Gary Kibbe as director of photography produces a visual style that I am very happy with. Our working relationship began on *Big Trouble in Little China*." (see AC June 1987) "He was the camera operator for Dean Cundey, and I was impressed by two things: his eye and his discipline. Unfortunately, in the movie business now, that sort of thing is disappearing. Everyone expects to arrive in town and be-



Above: Alien helicopters in pursuit of Nada rise suddenly into frame. Below: Stuntman James Lew takes a fall as the police level Justiceville, encampment for the homeless. Opposite page: Frank (Keith David) and Nada (Roddy Piper) get to know each other around a Justiceville campfire.

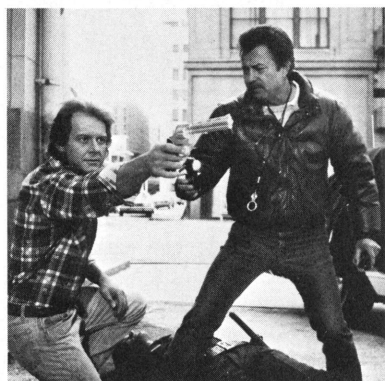
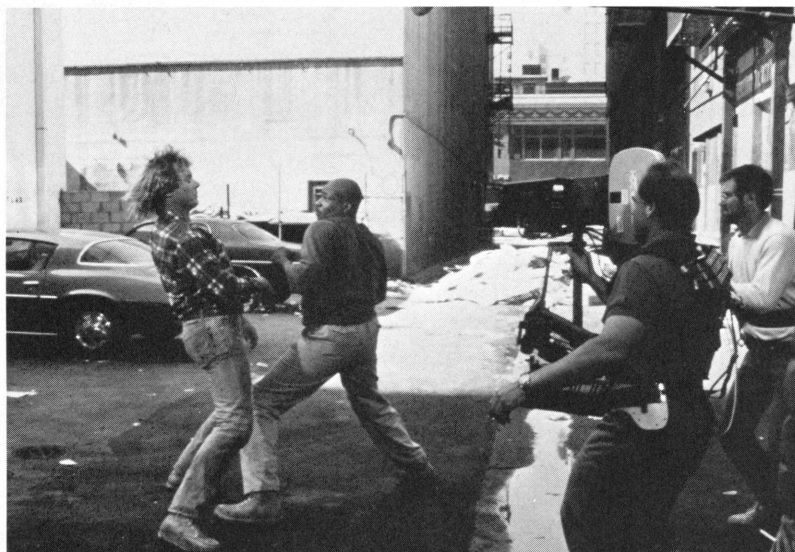
come an instant star. There's not a willingness to learn the basics of a craft and put in the years of training that are necessary. Gary is about as far from that as possible. He's worked behind the camera for years and years, under some of the great cinematographers. His attitude is 'Here is the work. How can we make this great?' His attitude and his basic innate talent make this a strong working relationship."

Kibbe is a veteran operator and was nominated for an Academy Award for his cinematography on the short feature *Lovestruck*. His

lighting style for *They Live* is a direct outgrowth of the storyline. "John likes a modern day realistic look," he says. "I pretty much key on low light levels, combining bounce and hard light for emphasis on certain things. Sometimes I'll let areas fall off, and then subtly draw attention by hitting something in the background. Working in low levels allows you that subtlety, whereas being deeper, in terms of light balance relationships, tends to make things go black on you faster.

"We shot anamorphic, with Panavision cameras and Ultra-

Right: Director John Carpenter (seated near camera) and producer Larry Franco size up a shot in downtown Los Angeles. Center: Shooting the complex alley fight sequence. From left to right, Roddy Piper, Keith David, Panaglide operator Ray Stella, assistant cameraman Clyde Bryant, and director of photography Gary Kibbe. Below: Kibbe takes a reading near Piper in a downtown Los Angeles alley.



speed lenses. With some of these, we can get down to 1.4. We stayed pretty much between 16 and 20 footcandles for the key, but for some of the larger interior scenes, like the unemployment office and the Bilt-

more, that went up to around 25. John shoots all of his pictures in Panavision anamorphic. We almost went to Super 35, but decided to avoid losing another generation. We used Eastman 5294 for night exteriors, and 47 for the day. I tested everything that Eastman had, and I still felt that 47, in terms of richness of color, is what came out best for us. We were shooting in a lot of dingy, grungy places, with textured walls, and for areas like that, I felt that the 47 would give a little more. Also, I'm more familiar with 47 than 97.

"John and I discussed the use of lenses, and in *They Live*, as in most of John's films, zooms are avoided. Prime lenses give you that

flexibility of passing by objects, whereas zooms just narrow the field. This way, with a dolly move, you retain the depth and get subjective movement. We had a lot of dolly movement, and quite a few Panaglide shots. Panaglide is difficult to light for, especially with budget constraints, but it's so effective when it's properly used – when the scene calls for it. On the set, it's important to be able to respond to anything that comes up – and John likes to be spontaneous."

"Spontaneity is very important to me," agrees Carpenter, "so much so that I don't even storyboard my movies anymore. I used to storyboard, probably because I came out of film school, and I thought it would be cool – you know, Hitchcock did it, I'll do it. And I think the result is often a movie that looks like a computer card. Producing a visual image should be instinctual. You see a lot of films that feel punched out and cold, and you can see the storyboards going by. The other problem I have with storyboarding is that it makes movies even more like television commercials and MTV. They're beautifully shot, just gorgeous and mounted with such slickness, but without any feeling of humanity, just an anonymous veneer."

Carpenter has strong feelings about what he considers to be the inhuman nature of today's films. "I find that the biggest movies now, that are making the most money, seem to be anonymous. They're not made by a person – there's nobody there to provide vision. The studios test films in terms of demographics, which results in films that are familiar to everyone and offensive to no one. There's a hypnotic/symbiotic relationship – we give the public what they want, and they sleep through it. So with films like *They Live*, we're trying to break free of that."

Roddy Piper's wrestling experience came in handy for an extended fight scene. Nada tries to convince his best friend, played by Keith David, to try on the sunglasses (the sunglasses being an

important story point). A disagreement of this nature would not normally kick off a knock-down, drag-out battle, but in Carpenter's hands, it becomes a symbolic, epic struggle between the true-blue fighter of the good fight, and he who would sell out his friend.

"The fight becomes a battle of wills between the two men," says Carpenter. "It reminds me of the ending of *The Quiet Man*, where John Wayne is fighting Victor McLaglen. They're fighting over something relatively insignificant, but there are broad thematic undercurrents. We shot the scene in an alley over a period of four days. By using the Panaglide and some of the power moves that Roddy knows from wrestling, we tried to break from the stereotypical action formulas. We rehearsed the fight for weeks, and every move was scripted. There is real contact, and they're beating the hell out of each other, but the fight has some ballet-like qualities. I haven't seen anything like it in recent film."

In a turn of the story reminiscent of William Castle's *13 Ghosts* (1960), Nada finds that by wearing special sunglasses, one can differentiate the aliens from actual humans. The glasses also reveal the omnipresent subliminal messages, meant to guide earthlings into conformist, economically efficient lifestyles. Signs that appear normal to the naked human eye are revealed to have suggestive inscriptions. Unfortunately, the glasses cause excruciating headaches for the human wearer. After considering a number of alternatives, Kibbe and Carpenter decided to use black and white for POV shots through the glasses, with electronic interference to give the impression of pain. Here the cinematography takes an active role, drawing the audience into the story by revealing another level of perception, depicting visually what Nada feels as well as sees.

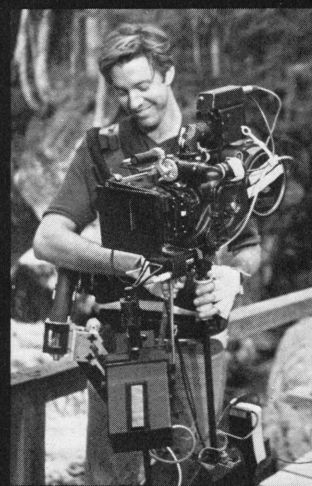
Veteran effects man Jim Danforth did the photographic effects for the show. He discusses his techniques for the black and white sequences, and the other effects

shots for *They Live*:

"In the film, there are some matte paintings (Bill Taylor, ASC, of Illusion Arts, helped with the matte work), some optical effects, and a couple of stop motion animation shots, about ten special effects shots in all. The interesting aspect is that the picture is in 'Scope, which severely complicates the visual effects problems. In order to overcome that, I resorted to the interlace process technique, which I don't think has been used in a number of years. I built a special front for the Mitchell camera, which enables me to rack the lens across, so that I can shoot a left half and a right half. In other words, I divided the 'Scope frame down the center, and shot a non-squeezed left hand image and a non-squeezed right hand image. You can't do that by panning the camera, because you get a keystone effect, and a cosine distortion effect. The lens is slid across like a rising front lens on a studio view camera.

"We shot several background plates in that fashion, which are rear projected with a double projector, one projector for each image. They're fused together with a system of adjustable masks, really just cutters in the light beams of the projectors," he explains. "This way, we get a very wide image, a greater information recording area than regular anamorphic 35 or VistaVision, so that keeps the quality up. This image is re-photographed with an anamorphic lens on the process camera (the camera which is photographing the matte paintings and the projected backgrounds). The same goes for the animation sequences and their projected backgrounds.

"The straight opticals are done on a printer, using material that is already squeezed," Danforth continues. "There was one scene in which we had a kinescope effect, where we had to take a film scene and turn it into a video image. The film was not shot squeezed, so we had to transfer that to tape, play the tape onto a video monitor and shoot it with the squeeze lens on the taking camera.



Rick Tiedemann

STEADICAM
Owner/Operator

212-570-7256

617-338-6769

**NEW SHOTMAKER
CLASSIC CAMERA
CARS. \$195⁰⁰ PER
DAY. COMPLETE.**

Including generator, battery pack & towing equipment. Plus 100 FREE MILES per day.



the Shotmaker[®] COMPANY
A Division of Camera Platforms International, Inc.

28145 Avenue Crocker,
Valencia, California (805) 257-1444
East Coast Operations Center,
Atlanta, Georgia (800) 426-6284

© 1988 Camera Platforms International, Inc.

Video Assist Match Dissolve.



Effect your video assist with
Cinema Electronics' Shot Box.™

Increase Productivity. Instant
Set-up, Easy Handling & End
Cable Frenzy!

Call: 1-800-MR.VIDEO

Shot Box Features

- Frame Synchronizer/TBC.
- Ultra-high resolution frame-store (2 images).
- Multi-Mode Switcher.
- Horizontal & Vertical Position Controls.
- Battery Op: 500mA/12V.
- Output Compatible with NTSC & PAL.
- Compact: 8" x 12" x 2".
- Lightweight: Under 3 lbs.

Cinema Electronics

820 Pacific Coast Hwy #120
Hermosa Beach, CA 90254
© 213-376-0403
Fax 213-372-6765

To avoid the sync problems and frame interlock equipment, I just shot it stop motion. The scene was done the usual way on the optical printer.

"The black and white scenes for the film were shot on color stock. Originally, I was going to 'decolorize', if that's the right term, the scenes, which they wanted very contrasty. We made a number of tests on the optical printer. In order for us to get a range of contrasts, I made two prints from the color negative: a 5234 black and white print, which we developed to a gamma of .65, and a 5369 black and white print from the color negative, which went through the normal gamma, about 3.2. These were printed back onto internegative stock. I determined the right filter pack for neutralizing, so that when printed on a normal light at the lab, it gives you a true black and white, a totally neutral image. By splitting the exposure between one pass from the low contrast 5234 and one pass from the high contrast 5369, we were able to get a range of contrasts. If we went 50/50, we'd get something in the middle, if we go entirely from the 34, we get a very low contrast, a very 1930s black and white look. Unfortunately, all of this work eventually became somewhat academic, because they subsequently decided to do the decolorizing electronically, in order to add the interference effect. For some of the scenes, I was also able to neutralize some of the process projection, so that I was projecting black and white plates and photographing the black and white background, while adding a painted black and white foreground which was photographed on color stock. It worked out pretty well, and I was able to get a neutral, true black and white image.

"Another challenge was a scene which had to go from color to black and white in one scene, on one piece of negative," recalls Danforth. "There was a matte painting of a color scene, a building which was made to look like an ad was painted directly on the plaster-work. I did a wipe in the camera

MACRO LENSES for Creative Cinematographers

— new high quality macro lens conversions from OpTex.

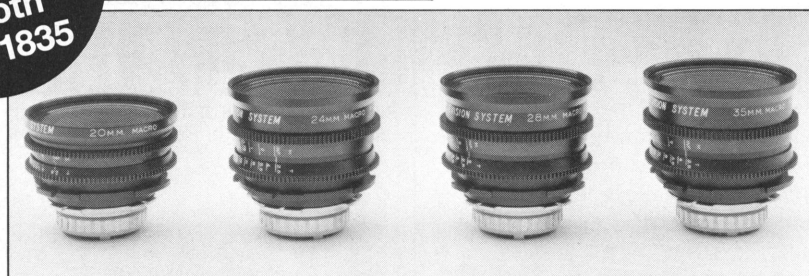


OpTex have re-engineered two **Pentax macro lenses**, featuring minimal light loss in comparison with other macro lenses, and excellent optical performance to satisfy the most demanding cinematographers.

► **Pentax 100mm f2.8:** 1:1 macro ratio; Arri PL or BNCR mount; focuses near-far in less than 360° in conventional motion picture direction.

► **Pentax 200mm f4:** 1:1 macro ratio; OpTex Universal Mount System — suitable for most 16/35mm and 2/3" cameras.

OpTex
at
SMPTE
booth
No. 1835



PLUS . . .

. . . a unique series of **Nikon** wide angle macro lenses converted for use on all Arri Standard/BNCR mount cameras (also available in PL).

► **15mm T3.5; 20mm T2.8; 24mm T2.8; 28mm T2.8; 35mm T2.8.** ► Top quality **Nikon** optics, minimal light loss in macro mode. ► MOD ranging from 0.15m — infinity. ► Lens rotation near-far in less than 360° in conventional motion picture direction. ► Standard pitch gear rings on focus & iris. ► Available individually or in sets.

With the introduction of these macro lens conversions, **OpTex** bring you the widest opportunities for superlative macro cinematography. Full details and specifications on request — please call or write.

OpTex

OpTex 22-26 Victoria Road, New Barnet, Herts. EN4 9PF, UK.
Tel: 01-441 2199. Telex: 8955869 OpTex G. Fax: 01-449 3646.

Buena Vista Studios Visual Effects Group



A FULL SERVICE EFFECTS FACILITY

Titles/Graphics
Opticals
Matte Painting
Photo Roto
FX Animation
B&W Processing

Blue Screen
Sodium Process
Motion Control
Miniatures
Animation Camera
16mm, 35mm, 65mm
VistaVision

NEW

RUN BAGS



K&H Products, Ltd.

Box 246

North Bennington

Vermont 05257

► Finally a "Run Bag" for video work that can organize. The main compartment has three organizing spaces, specially designed expandable cable pockets on both sides...plus catchall pockets on each end. All this makes organized space for extra cable, gaffer's tape, batteries and whatever. Two sizes available. Call for information.

PHONE 802-442-8171

FAX 802-442-9118

TLX5106005222 K AND H

SCENE SLATES for every take!



Slate it with one of our nine versatile scene slates including alder or oak clapper slates and insert slates, manufactured for film and video professionals.

We also offer an exciting line of novelty slates including mini-invitation slates, slate clocks, mirror slate clocks and mirror slates. Free catalog available from:

ALAN GORDON ENTERPRISES, INC.

1430 CAHUENGA BLVD., HOLLYWOOD, CA 90078

TEL: (213) 466-3561 - TWX: 910-321-4526

FAX: (213) 871-2193

UNDERWATER AL GIDDINGS

Production

Emmy/Cinematography

Directing

Never Cry Wolf

Filming

James Bond

Stunts/Doubles

For Your Eyes Only

Props/Post Prod.

The Deep

STOCK FOOTAGE

800,000 feet and 60,000 transparencies of whales, sharks, dolphins, wrecks, coral reefs, . . . and more.



OCEAN IMAGES (415) 562-8000

8001 Capwell Dr., Oakland, CA 94621

from the color background with the color painting to a black and white background with the black and white painting. The black and white painting is different from the color painting; it has the secret message that the characters see when they put on the glasses – the subliminal image. That shot was done onto color stock in the camera. But it was neutralized so that the color image is normal and the black and white wiped on. We went to great pains to try and keep the non-dupe quality level up, but that may be processed electronically, too, so I'm not sure how it will look."

Danforth applied his animation expertise to two scenes involving an alien operated flying spy camera, which tails and photographs unsuspecting humans. "The spy camera is a flying saucer-like vehicle, about two feet in diameter, and it looks like a yo-yo flying in its side," he says. "It's a dimensional model with gear mechanisms inside of it for the expansion and contraction. When it finds its subject, it pauses, hovers in the air, and expands and opens up. Then a snorkel-like hose with a camera on the end comes out, looks around and takes pictures. After building the model, I shot these two scenes with a normal stop-motion animation technique."

They Live is the story of a battle against aliens who came to take over the earth, using human greed as their ally. At the same time, it is a social commentary with striking parallels in today's society. John Carpenter's commitment to making out of the ordinary films is tempered, however. "I must tell you that my criticisms of society and the film business are not entirely serious," he says. "I've made a lot of money in the film business the way it is run today, and I am a complete capitalist. I'm just advocating a little humanity in the world. In order to do that, you have to go strong in the other direction, be a little outrageous. It's fun to attack the status quo." △

“I have been filming in the Super 8 format since 1972, and at this date I have produced over 50 films . . . Super 8 will continue to be my first choice.”

Rich Work, Workhouse Film Productions

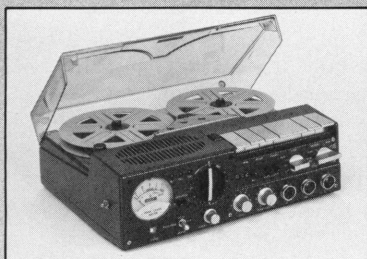


**The SUPER8
SYNC SOUND
SYSTEM is a**

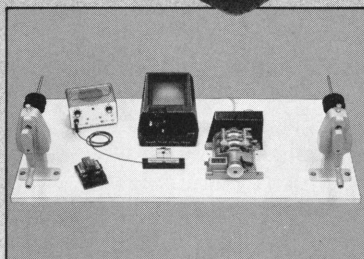
complete production facility well within the reach of limited budgets.

It includes the Beaulieu 7008 Pro with the famous Angénieux 6-90mm F1.4 macro lens; Mag IV Fullcoat Recorder; Tascam Porta One Ministudio for sound mixing and voice-overs; Super8 Sync Sound 2 Gang Editing Bench specially designed, motorized, and sprocketed for Super 8; plus a full selection of essential equipment and valuable accessories . . . Everything from tripod to projector, from microphone to battery charger.

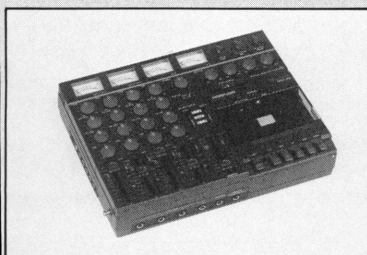
Send for our new full-color brochure and discover for yourself the excitement of Super8 filmmaking! You'll receive detailed information on the Super8 Sync Sound System with all tech specs and prices, or call us on either coast and ask your questions.



Mag IV Fullcoat Recorder



Super8 2 Gang Editing Bench.



Porta One Ministudio



Additional Production Equipment.

**Super8TM
SYNC SOUND
SYSTEM**

Super8 Sound:

95 Harvey St., Cambridge, MA 02140 (617) 876-5876
2217A West Olive Ave., Burbank, CA 91506 (818) 848-5522

Fisher Stevens' toy robots fascinate Cynthia Gibb while street hustler Michael McKean contemplates making a deal.



Photos by David Whittaker

Robot Foils Robbers in *Short Circuit 2*

by George Turner

Produced by David Foster, Lawrence Turman and Gary Foster
Directed by Kenneth Johnson
John McPherson, ASC, director of photography

John McPherson, ASC, has come to think of jet-lag as an occupational necessity because all of his recent productions have taken him far afield. *Jaws IV* required months of location work in the Bahamas, *Short Circuit 2* necessitated a long stay in Toronto, *The Littlest Victim* (which is produced in high definition rather than on film) took him to Alabama, and much of *Fletch II* demanded his presence in Louisiana and New York.

Short Circuit 2 is the sequel to a comedy which brought in big boxoffice bucks several years

ago and went on to become last year's number one home video. The first round concerned a robot invented as a military weapon who, after being struck by lightning, began to think for himself and went AWOL. In the second episode, the robot comes to the big city to help his friend and co-creator, a comically shy genius from India, and becomes involved with bank robbers.

Although the city is Toronto, it is photographed in such a way as to represent an anonymous Big City, USA. According to

McPherson, "It ultimately became sort of a nondescript large American city. It wasn't necessarily supposed to be New York, but I'm glad people think of it that way.

"The thing about *Short Circuit 2* that I think is most appealing is the robot, Johnny 5," McPherson said. "He really has a human personality and audiences care for him as a person. Eric Allard, a great special effects man, designed and built him and is also associate producer of the show. He had puppeteers and mimes controlling different parts of the little

guy."

Robert Mills was in charge of the head movements, Trish Leeper created the facial expressions, Michael Sorenson operated the mobile base, and Gord Robertson was in a telemetry suit making upper body moves which Johnny 5 emulated. The voice on the sound track is that of Tim Blaney.

"Surprisingly enough, there were very few breakdowns," McPherson recalled. "He worked almost all the time and we very rarely waited for him. He was well orchestrated and everybody was in tune."

Rain – a factor often to be considered in Toronto – caused occasional problems with the robot's electrical system and cold weather adversely affected the hydraulic system, which was designed in Southern California. Both the robot and some radio controlled model airplanes malfunctioned when working at a location near the gigantic CN Tower, which sends out broadcast signals of more than 400 kilowatts (Johnny operates on *one* kilowatt). Such problems were quickly overcome by the technical crew.

"Kenneth Johnson did a grand job of bringing out that human quality in Johnny," McPherson noted. "This is Kenny's first theatrical feature, but he has a strong background in TV. I did *Hot Pursuit* with him in Louisiana in '84 and it was a wonderful experience. He produced, wrote and directed the original four-hour V and I photographed that in 1:85. He created *The Incredible Hulk* and *The Bionic Woman* and a lot of other pilots and shows.

"*Short Circuit 2* was a very difficult show. We had a lot of weather problems each day that caused some problems in matching scenes. We hit a lot of seasons – it was warm in September when we started principal photography and 'way below freezing when we finished, around Christmas of 1987. When the wind blew off Lake Ontario it was bitterly cold. I ended up having to use fast film outside a lot in daytime because the weather was

so changeable. That was probably my biggest frustration on the whole show."

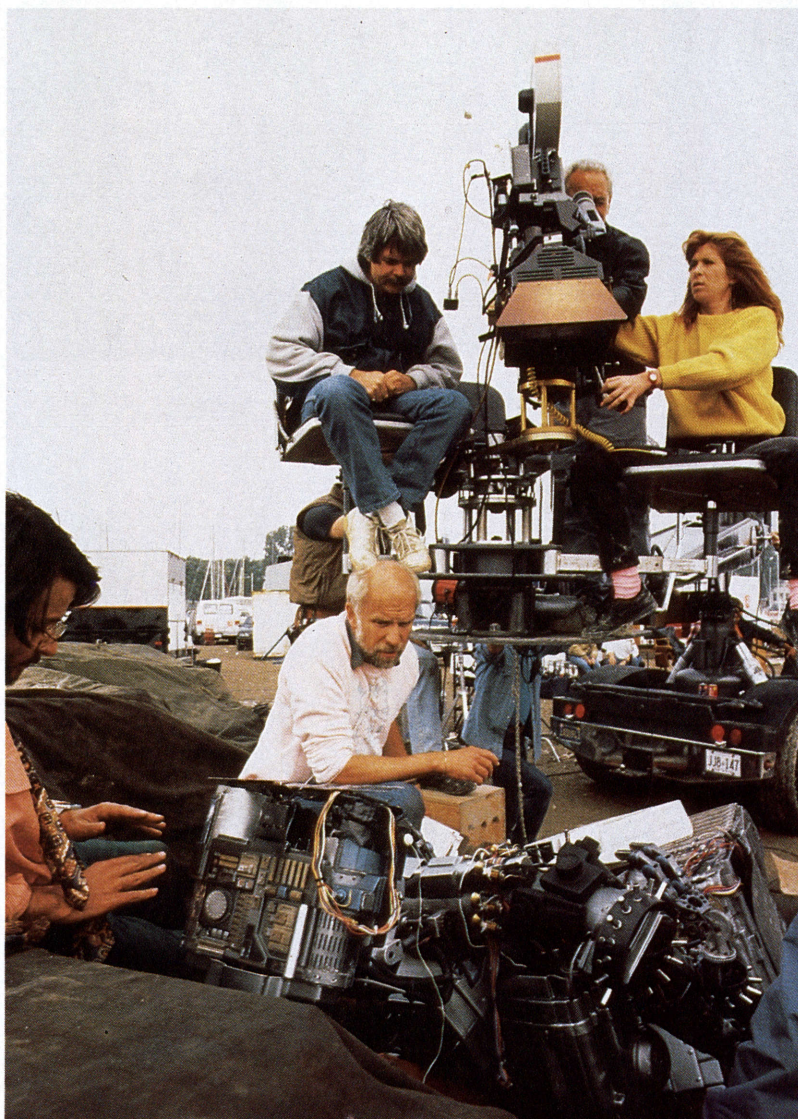
He mentioned one rule of thumb he found helpful in working under the wildly variable Canadian skies: "I try to shoot in the north light when working above the equator. If you point north the sky tends to be a bluer, darker color; when you shoot south you tend to be more in backlight and the skies are usually washed out. We tried, where possible, to plan any shooting in which the sky shows to use the northern sky.

"I also used pola screens a lot as well as some soft blue grads that enhance the sky and take the starkness out of it. There were some wonderful cloud formations and the polas helped bring them out. They also helped at times to take some of the extra glare away from widows and water."

Approaching each picture as a separate challenge deserving of

fresh thinking and techniques, McPherson likes to make extensive tests of lenses, emulsions and laboratory methods before production begins. By suiting the tools carefully to the desired images he is able to deal more subtly with the nuances of a story. For this reason he often varies his choice of negative stock and equipment.

"We used Panaflex cameras throughout *Short Circuit 2* and shot on Eastman 5247, 94, and 97," he said. "I was rating the 94 down to around 200 much of the time so we could print very high. The printers at Medallion Laboratories in Toronto, which did our negatives and dailies, are trimmed a little differently. At Deluxe, for instance, if I rated 94 at 200, I'd be 50 over, but at Medallion there's about a 10 or 12 point difference in the printing, so I could rate it a lot slower there and print high. It holds within the printing lights without having to trim the printer."



Cinematographer John McPherson, in chair, and director Kenneth Johnson, kneeling, photograph the badly damaged Johnny 5.

Above: *Johnny 5* manufactures mini-replicas of himself with astonishing speed. Center: *Johnny 5* innocently shows stolen car stereos to street gangsters who have convinced him they are city employees. Below: Setting up a dolly shot on the shore of Lake Ontario.



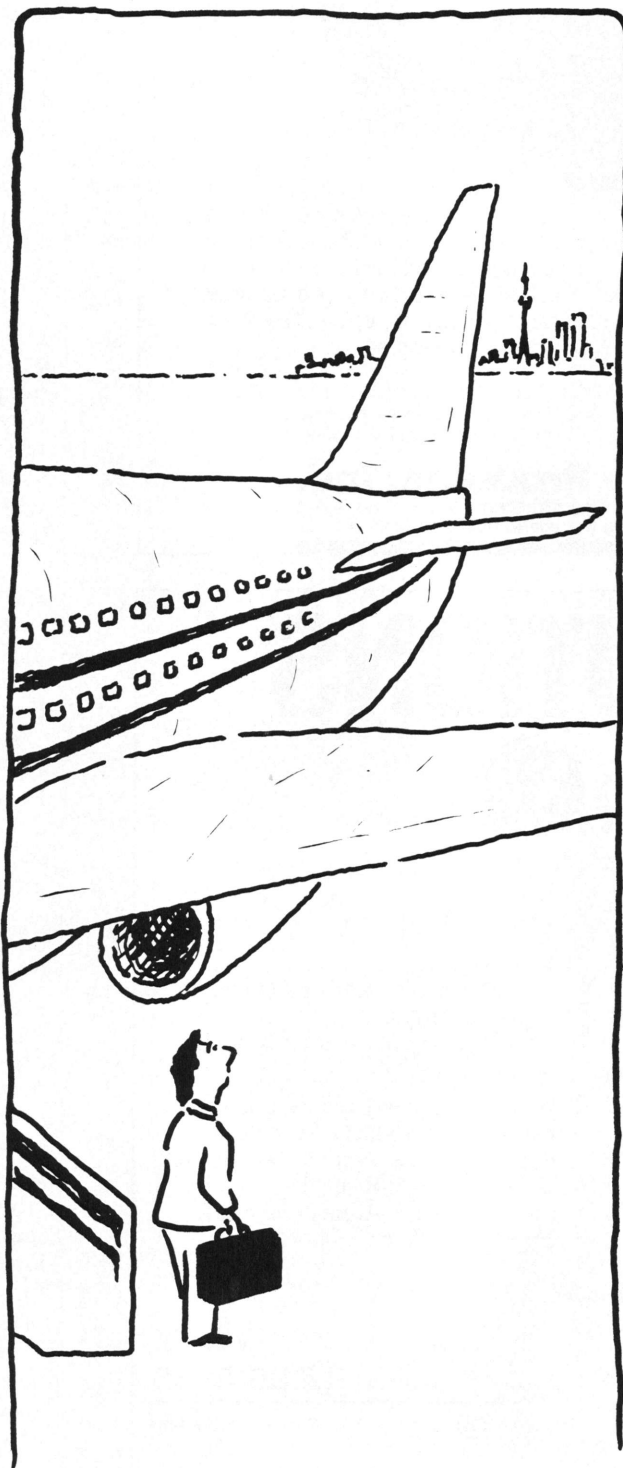
A glance ahead to the project on which McPherson was working at the time of this interview gives an idea of the scope of the cinematographer's pre-production planning:

"Since then, on *Fletch II*, we tested both 94 and 95, and I was really vascillating back and forth for a time. I tested the Primo lenses and the Panavision Ultra Speed lenses with 94 and 95, trying all the different combinations. The conclusion I came up with for this show was that the Primo lenses are more contrasty than the Ultra Speed lenses and they're not quite as fast (although I don't usually shoot under f:2 anyway, so that wasn't really a big issue). The 95 film proved to be a little more contrasty than the 94. On close examination of the tests we did with the emulsions that we had, the 95 was slightly – just slightly – more grainy than the 94. I was really surprised, because our test results were just opposite of what most people believe to be true. However, I sent some to Rob Hummel at Technicolor and some to Michael Crane at Deluxe, and we all decided that in our test the 94 was less grainy than the 95. The 95 was more contrasty with the Primo lenses than the 94, so that it looked a little more highly resolved, although under close scrutiny it really wasn't. I opted for the 94 because this was a comedy and I didn't want it to be very contrasty. And, although I've used the Primo lenses before and I like them a lot, the Ultra Speed lenses were wonderful, and when used with the 94 they worked out much better for this particular show.

"I find myself rating 94 slower and slower all the time," McPherson added. "On *Fletch II* I'm rating it as low as 160 ASA, and it's working out well. We're printing very high, which I like for resolution of the image and better color saturation. It gives a good, heavy negative and, of course, we can get good dups off it for the release prints. So I'm rating it 160 and 250; only rarely will I get up to 320. It puts me on the edge and I have to be very careful, but I love what's

YOU CAN LEAVE HOME WITHOUT IT, IF YOU'RE SHOOTING IN TORONTO

Don't worry about bringing it with you. Toronto is the third-largest film and video production centre in North America. That means Toronto has everything a producer needs or requires — crews, technicians, actors, studios, labs, equipment, supplies, and accommodations — all available at costs that will make your trip worthwhile.



Before you start packing your suitcase, contact:

Naish McHugh
Toronto Film Liaison

Planning and
Development Department
18th Floor, East Tower,
City Hall
Toronto, Ontario
M5H 2N2
Telephone
(416) 392-7570

Member of
AFC
ASSOCIATION OF
FILM COMMISSIONERS

STRAP ON THE ONLY TRUE 30 VOLT BELT.

BETTER
QUALITY

LOWER
PRICE



30V 4.4AH
SUN-GUN
BATTERY

Compare the GM30B Battery Belt with any other system. Our lighting belt lasts longer because it's built better. We use Sanyo cad-nica cells exclusively. (They're the best made cells in the world.) And our belts contain 25 cells; others have 24. With our system your

lights will last up to 35% longer than other units. All of our products come with a one-year unconditional guarantee. Check out the GM30B. We believe it to be the best made battery belt you can buy. G + M equals better quality at a lower price.

- Made for 250 watts, only true 30 volt belt
- Features a built-in overnight charger
- All Velcro, belt can be removed with one hand

- Excellent performance from -5°F to +115°F
- Same day or next day repair service available
- Call 800 number for quick answers

G + M Power Products, Inc.

943 NORTH ORANGE DRIVE LOS ANGELES, CALIFORNIA 90038
213/850-6800 • FAX 213/850-5143 • 800/621-0849 EXTENSION 132

SOLUTIONS



Solutions...

That's what the Visual Departures symbol stands for—reliable products that make photography easier and help you produce better pictures.

All of our products are designed by professionals to solve a wide range of problems in the studio and on location. Another plus: they're built to last.

You deserve quality products, priced fairly and backed with integrity. The Visual Departures symbol guarantees it.

Write for our new expanded catalog with over 20 products. Send your name and address with \$1.00, for first class postage, to Visual Departures, Ltd., 1641 Third Avenue, Suite 202, New York, NY 10128.

Some Visual Departures originals include:

- Flexfill® reflectors
- Dewitt's Strap™
- Steadybag®
- Flexloc™
- Quick Stick™
- Visualizer™
- Bracket Finder™
- Camouflex®

Visual
Departures
Ltd.



© 1988, Visual Departures, Ltd.

happening."

According to McPherson, one of the good things that happens when fast film is used in this manner is a greater realism in night effect shots:

"We did some day for night on 94 and I underexposed four-and-a-half stops. In the shadows we were reading 2.3 and there were a few shafts of sunlight coming through that were reading around 4.5 or 5. I shot it at f:11 with no filters except an 85. It looks just like night and cuts perfectly into the night for night stuff."

A sequence filmed in a magnificent old church, where Johnny 5 goes to confess, is McPherson's favorite in *Short Circuit 2*. It was lighted for beauty and conveys a magical religious mood even in a comedy sequence. Another favorite met the fate of many a pet photographic coup: "We had a very moody laser sequence that was cut out entirely. The picture would have been much too long with it, but on a purely visual level it was magnificent."

Some of the more difficult scenes in *Short Circuit 2* were staged in a large department store in Toronto. "All of the sequence shot in the department store had to be duped because it runs under the credits," McPherson explained. The optical titles were produced at Pacific Title in Hollywood. "In the dailies it looked great. In the dupe it still looks okay, but just a little grainy.

"We only had that store on a Sunday and it was lit by hundreds of fluorescents, so we had to go with the existing lights. We tried to get the overall color rendition and then I'd substitute our lights—minimally—with that particular color in mind. We used HMIs and also matching fluorescents. We couldn't get lights into some areas where, because of the close proximity, the camera would see a bulging light. So I put slim mirrors in those areas and highlighted other places, bouncing reflections to the mirrors to get sources where we needed them.

"We utilized a lot of large equipment in Canada, including

Condor cranes and some huge industrial cranes," McPherson revealed. "We couldn't obtain a Muscolight to put moonlight in the night skies, so we used Wendy and Dino lights and set them back about half-a-mile. On some of the night sequences we had to balance through a sign with a lot of words on it."

McPherson is fond of a sequence in which Johnny 5 plucks Jack Weston out of a speeding boat and swings him up 300 feet into the air before setting him down on terra firma. "We were up about 300 feet high in a bucket on a gigantic crane which was mounted on a barge in Lake Ontario. He would swing right up to us and back. We flew Jack on the closer shots, where he wasn't quite so high, and we had

a stunt double do the higher stuff."

McPherson was enthusiastic about the laboratory work done in Toronto. "The dailies, even though they were one-light prints, were like timed prints because they took a lot of care. Chris Hinton, who was formerly with Rank in London, was very helpful. I'd love to work with Medallion again. I started to follow through on the release printing - I made one pass at Technicolor in Los Angeles, then I had to leave and do a high definition movie, *The Littlest Victim*, in Atlanta. Then, when we were ready to make another pass, I had to leave to start *Fletch II*, with Chevy Chase, directed by Michael Ritchie. I went to Louisiana and then Los Angeles and then to New York for five weeks."

△

About HDTV...

After completing *Short Circuit II*, John McPherson was in charge of the videography of *The Littlest Victim*, which was produced in Alabama using Sony's high definition system. He commented on both the strengths and weaknesses of the medium:

"Chemicals can only take us so far. I foresee that someday a satellite will beam down a high definition image to the giant screen of a major theater in, say, Westwood.

"From a visual viewpoint - strictly for the pristine quality of the look - there is an added dimension that we don't get in film. It is strongly resolved, and then it can be de-resolved by using filtration. If you see it on the 1125-line high definition screen it literally jumps out at you. It does not look like video but it does not look like film, although it resembles film more than video. It has a third, definitely different look of its own.

"There are a few problems that will have to be worked out. The cameras we used were slow; the ASA rating was about 64 - I rated it at 47, sometimes even 40 ASA. Then I went to NAB in Las Vegas and played with the new faster Sony camera, which is about 160 ASA, and I rated it about 125 - it was wonderful and about one stop faster.

"The speed of the cameras must be improved to keep up with the high-speed films. Eventually, they'll have to get rid of the tubes, because the tubes still allow the trailing of lights, such as moving headlights, in the lens; when they put chips in the cameras it should help that problem. One problem - which in my opinion as a cinematographer is of major concern - is that the viewing system is inadequate. It's a small, black and white viewfinder on the side of the camera, and you really can not light through the camera. With experience you don't need ever to light through the camera, of course, but a lot of us do. I talked to Sony about it and they've changed their thinking about it. They've consulted with Panavision and they're trying to bring the finders into line so they'll be comparable to those on motion picture cameras. If they can get a parallax system on the camera that you can actually light and see through, it will be wonderful. The umbilical cord that the camera is hooked up to is still a nuisance; it will have to go eventually. The camera should be self contained.

"Those are a few of the drawbacks, but, when all is said and done, the visual images that can be created with it are spectacular - even when transferred to film."

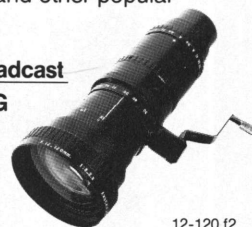
△

Computer Optics

Lens Service Division

We specialize in servicing Angenieux lenses. We also repair Canon, Fuji and other popular lenses.

16mm Broadcast
35mm ENG



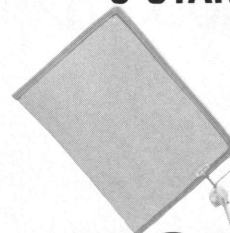
12-120 f2
Angenieux zoom

- ★ FREE EVALUATION
- ★ ONE YEAR WARRANTY ON PARTS & LABOR
- ★ COMPLETE INVENTORY OF PARTS AND ACCESSORIES
- ★ CUSTOM MOTORIZATION PACKAGES FOR MILITARY AND E/O CUSTOMERS

Computer Optics

800-258-1382 • 603-889-2116
120 Derry Road
Hudson, New Hampshire 03051

C-STANDS



PAGE 8

MATTHEWS CATALOG

CALL OR WRITE



2405 Empire Avenue
Burbank, California 91504
(818) 843-6715

"THE REEL THING"



Robotrix for *Short Circuit 2*

by Ron Magid

The delightful, sometimes formidable and always surprising No. 5 returned this summer. One part tank, one part boom and two parts Woody Allen, the robotic star of both the original *Short Circuit* and *Short Circuit 2* is the brainchild of visual futurist Syd Mead, whose designs were interpreted by Tom Pock and Chris Ross. The more difficult task of bringing No. 5 to convincing life was ably handled by mechanical effects artist Eric Allard, who proudly demonstrated the new, improved No. 5 at his All Effects studio in North Hollywood.

I was first introduced to the tin titan as he came racing towards me on the

shop's loading dock! Just as I was about to leap out of his way, No. 5 suddenly came to a quick stop, extended its arm, grasped my hand and shook it! When I appeared somewhat taken aback, the robot merely raised its eyebrows quizzically at me, boomed up to a rather intimidating height of 7 feet, reversed and raced back down the dock, gesticulating wildly with his arms.

After witnessing such a spectacular display of No. 5's talents, I was surprised and a bit disappointed to learn that he is not actually a robot. "A robot, by definition, is a mechanical device interfaced with a computer that can execute a set of

preprogrammed commands," Allard explains. "No. 5 is actually what would be called an ROV – a Remotely Operated Vehicle – in industry terms. He responds to commands issued from a series of radio control transmitters.

"No. 5 is the state-of-the-art action prop," Allard continued proudly. "I don't think anything that's ever been built for a film is as sophisticated as this self-standing prop. You can turn him on in five minutes and have him perform 45 different remotely controlled axes."

Despite No. 5's sophistication, Allard insists that the robot was built just

well enough to ensure that it could handle all of the demands of making *Short Circuit 2* on location in Toronto, Canada. "We believe in low-tech filmmaking," Allard says, "which means we try to satisfy the requirements of this two-dimensional frame in the most cost-effective way. If it includes using a rubber band and a paper clip, we're into it! We definitely know high tech and can go with it, but if it isn't called for, we're not going to build some white elephant Rube Goldberg thing that's really not needed."

Allard has always been in favor of using in-camera effects and action props like No. 5 whenever possible simply because he feels it gives control of the film back to the filmmakers. "With No. 5 handled live on-set, no one had to wonder how any of his scenes in the movie were going to look because he was right there in front of camera, live action," he says. "When I look at a script, I don't break it down like an effects company would, I look at it as a filmmaker who'd like everything to be done live as much as possible. If you can create the same effect on-set for a lot less money, why do it as an optical in post-production? Obviously, there are certain things you just can't do in-camera – if you want to have a huge spaceship flying in space, it's not cost-effective. Although mechanical effects are not cheap, the *Short Circuit* movies were a lot less expensive than they would have been had No. 5 been done using miniatures that had to be animated and matted in."

Although from the waist down No. 5 more closely resembles a tank than anything humanoid, from the waist up he's a lot like you and me – two arms, a chest and a head, albeit a rather strange one! The real innovation in the robots of *Short Circuit 2* versus those in the original film is the implementation of a telemetry suit, which takes advantage of this similarity in robot and human anatomy to create fluid, lifelike movement. The telemetry suit for No. 5 is a harness designed to fit over a puppeteer's upper body, which allows the robot to imitate the puppeteer's movements exactly. "When we were making the first film, we'd always said it would've been nice if we'd had time to build a T-suit – that would really have been the way to go," Allard recalls. "When *Short Circuit 2* came along, we realized this was our chance and I started lobbying for it. Ken Johnson, the director, was really keen on the idea and instrumental in helping to convince the Tri-Star execs that this was the way to go.



Bank robbers smash the too-smart robot to pieces. Opposite page: Getting Johnny 5 into an overcoat wasn't easy.

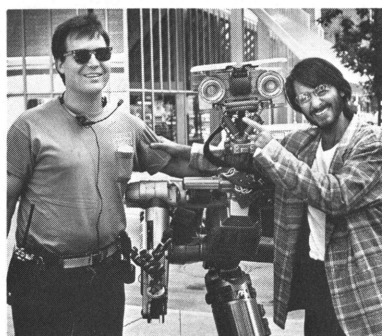
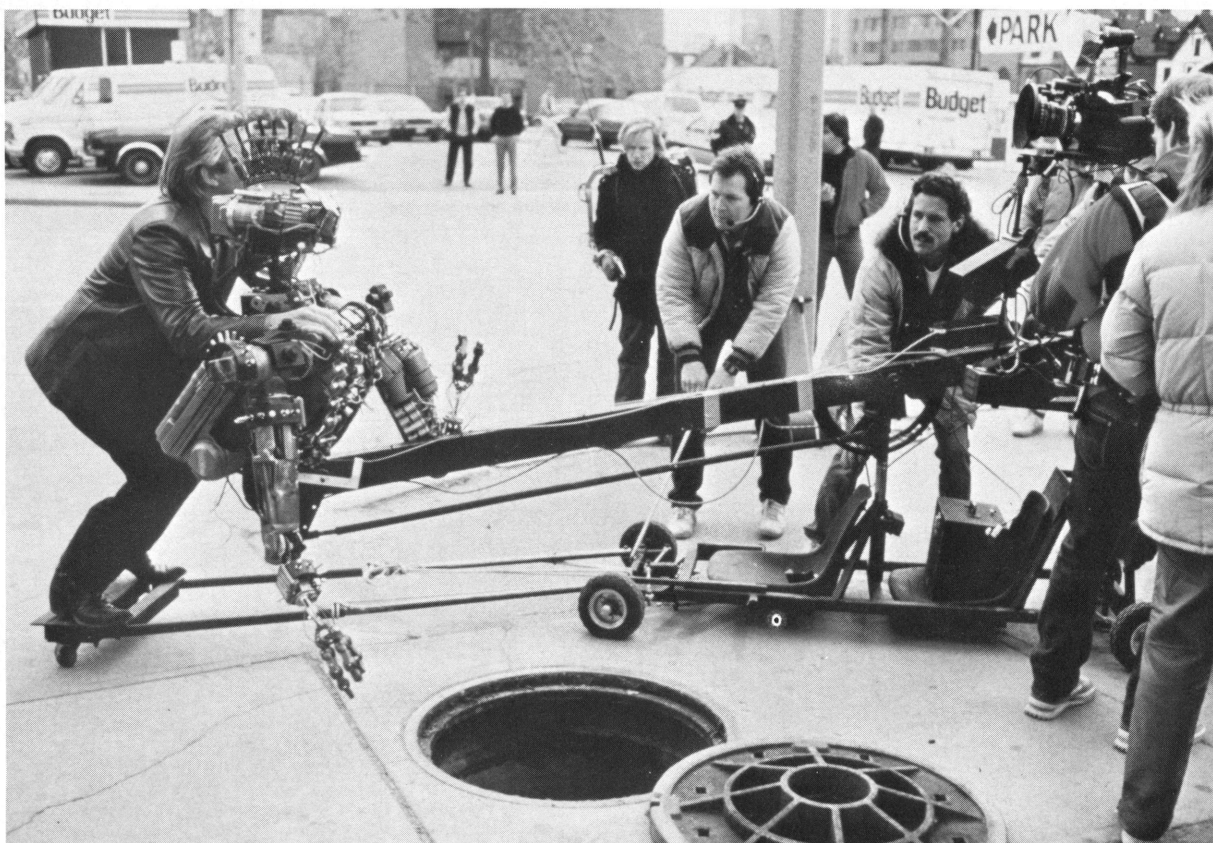
There's a natural tendency among filmmakers who don't understand the engineering problems and logistics involved in special effects to be afraid of something this complicated, but we had such a good record in terms of minimal breakdowns on the first film, they were willing to take a chance. The first thing we did was to build a single three-axis arm just to show them we could do it, and once they saw that they said go ahead.

"Everything about the telemetry suit was great," Allard enthuses. "It saved in so many areas: it took four operators instead of nine, it made the robot's ability to perform much better than before because it could gesticulate with its arms and really do some nice fluid movement."

Even more importantly, the telemetry suit allowed the actors to relate to No. 5 just like another member of the cast. "We told the actors, the director and the crew not to look at the guy driving and the puppeteers when they were working with the robot, but to talk to No. 5 like a real person and tell him what they wanted. We made sure our puppeteers were always paying attention and responded accordingly, which helped everyone to get into the mood that No. 5 was alive, that he had a personality."

Was there a downside to the telemetry suit? "Just a slight one," Allard admits. "The T-suit virtually eliminated the use of the cable-controlled puppets from the

Top: McKean and upper part of Johnny 5 travel on a specially designed conveyance. Center: Gordon Robertson in the telemetry suit. Below: Eric Allard.



telemetry suit. We just used regular Futaba joysticks, so it took nine people to operate the robot, and its movements were a little more haphazard. One guy would operate each elbow and arm, so there was much more orchestration involved.

While the original No. 5s were more crudely articulated, they were constructed well enough the first time around that Allard and company were able to cannibalize the parts to make their improved versions for *Short Circuit 2*. "We had originally built 15 robots — eight ROVs and seven stunt robots — for the first film," Allard says. "By the time it was over, we had trashed a bunch of them and they were in pretty bad shape, so for the sequel, we stripped them down to parts and rebuilt them. Bob Wilcox came in and redesigned the electronics and we built the telemetry suit. For the second film, we made five full-sized ROVs, two of which had the fully articulated arms and hands. The other three had no wrist movement, but still used the telemetry suit."

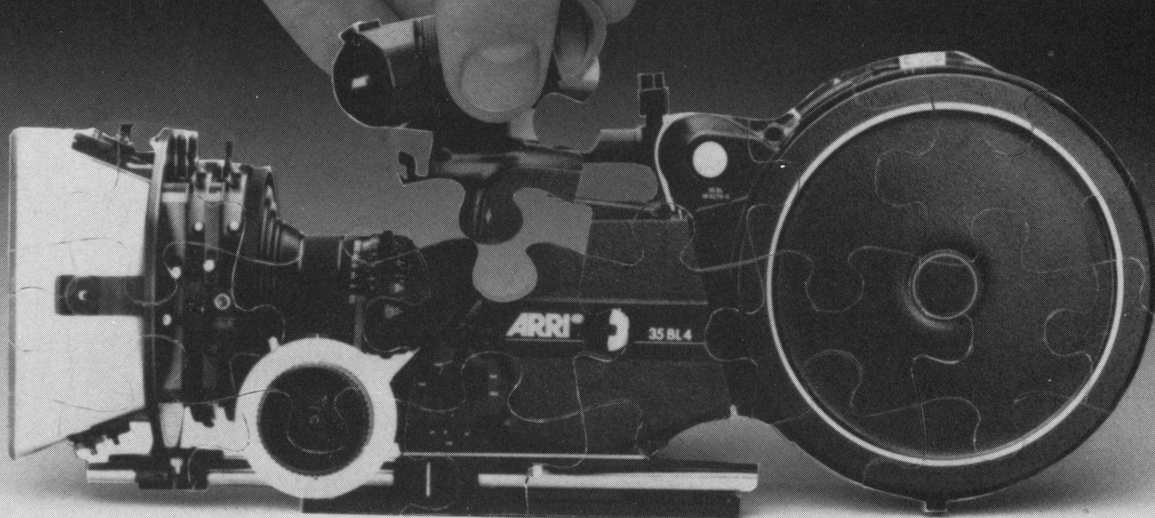
Although *Short Circuit 2* features only one No. 5, he sports so many different looks in the new film that Allard may have felt he was designing a small fleet. "The second film required a variety of different dressings for the robot," he ex-

first film, which I think was a mistake. There are certain movements you can do with them that the ROV can't do, but it was the choice of the director. Surprisingly, he was more comfortable using the ROV than the puppets, so we ended up using the fully operational robots for most of the film."

The advances Allard and All Effects made in the No. 5's mechanical make-up between *Short Circuit* and *Short Circuit 2* are truly remarkable. "We didn't have as extensive an ROV for the first film as we had for *Short Circuit 2*," Allard recalls. "We had eight ROVs and of course we didn't have the

**There
Are No
Missing
Pieces**

**When You
Rent From
Cine Video**



We Focus on Dependability, So You Can Focus on Other Things

Renting the equipment you need—all complete and ready to roll—does not have to be a major production. At Cine Video, our service department brings every order into sharp detail. They're knowledgeable, helpful and prompt.

And our equipment is second to none: State-of-the-art 35MM and 16MM cameras. Video cameras. HMI and tungsten lighting. Grip equipment. Trucks. Stages.

Everything at excellent rates.

So for your next movie, commercial or music video, rely on Cine Video. Wide-angle choice of equipment... Close-up attention to detail...

The best rental source from any point of view.



EQUIPMENT RENTALS AND SALES • STAGE RENTALS

948 N. Cahuenga Blvd. • Hollywood, CA 90038 • (213) 464-6200

CINE 60 SUN-GUN

Beautifully Simple

Beautiful . . . because it's fresnel-soft and uniform — ideal for video. And simple because . . . if 250 Watts is too much, change to 150 Watts. Need more? Go to 350 Watts. Want to go really light? Use 100W (12V) or 70W (14.4V). Outdoors, swing-in the built-on Daylight Filter. You color correct instantly! Indoors, swing away Filter and you have tungsten light! Never a need to readjust camera color controls here! For focus, vary the beam from 8 to 14 ft. For power, choose from 84 Battery Belts and Battery Packs. And, to make it beautifully simple . . . we put it all together for you in any one of 48 Portable Sun-Gun Kits, including Switchable 30V/14.4V combination Kits. See your dealer or send for data, today.

CINE 60

INCORPORATED

630 Ninth Ave.
New York, N.Y. 10036 Hollywood, C.A. 90028
(212) 586-8782 (213) 461-3046



SALES/SERVICE/RENTAL

- Dealer for most major companies including ARRIFLEX, SPECTRA, STEENBECK, and TIFFEN
- Full line of expendables
- Buy/Sell/Trade Used Equipment
- Motion Picture Equipment Service/Sales/Rental

AATON ANGENIEUX REPAIRS

(ARRI, ECLAIR, BEAULIEU, BOLEX Etc.)

- Factory trained by AATON and ANGENIEUX in France
- 20 yrs experience in motion picture field
- Servicing all major motion picture equipment

SMS PRODUCTIONS, INC.

445 W. Erie Street Unit 103
Chicago, IL 60610 312-664-3752

CALL FOR ACTION IN MALAYSIA?

JUST CALL FOR PETER ROBINSON STUDIOS

Call us PRS for short. We can arrange sponsorships for all film and video productions. We are the longest-established house in Malaysia and our close contacts with local authorities will ensure fast, trouble-free productions, right from day one. Hire our crew or rent our comprehensive range of equipment, we'll get it done.

Latest equipment on our list:

- Arriflex III (5 - 130 fps)
- Arriflex IIC
- Cooke Varotal 20:100
- Angenieux 25:250
- Arri HMI Lights
- Ikegami Camera
- BVH - 500 1" C Format Recorder
- Timecode recording, mixing, transfers
- Editron computer-lock systems
- And much more!

TELEX OR FAX

PETER ROBINSON STUDIOS
3, JALAN MENTRI
55100 KUALA LUMPUR, MALAYSIA.
Tel: 9851855, 9854546, 9853854
Tlx: 30646 Fax: 9844692

GET PRS INTO ACTION
AND YOU'LL GET IT RIGHT!

plains. "First he's got his Montana look, then he gets graffiti painted by these gangs, then he gets cleaned up. Afterwards, he gets beaten up and smashed, then he acquires the 'Road Warrior' look when he fixes himself up, and finally he has the gold look when he becomes an American citizen. We'd take the robot and dress it for the next sequence and then we'd just swap the arms with that of the previous robots. They were made on a production line, so they all had interchangeable parts. In fact, any part of any puppet could fit on any part of the live action ROVs. We quite often would take an arm off a puppet and put it on an ROV, so they were very flexible."

The remarkable new No. 5 boasts 45 individually controlled axes of movement controlled by four Futaba eight-channel pulsecode modulated transmitters and Futaba servo motors — all of which comes directly off the shelf and goes into each robot practically as-is. "Everything is off the shelf, for the most part, with the exception of interfaces from the Futaba components to the other components," Allard states. "The whole system's really based around the Futaba technology — off the shelf Futaba motors perform all the smaller functions like the eye movements, the little antenna that pops up on his head, the microphones and the eye flap and the irises. The lower boom and the back boom use Futaba linear actuators with servo boards and linear potentiometers built on-board. An actuator is a motor with a belt on it with a lead screw inside of it, which you can also get right off the shelf."

While use of off the shelf technology cuts costs, it made life difficult for electronics designer Wilcox, who had to integrate all the different components found on the shelf so they all worked together as a system. "Since all servo motors are DC motors," Allard says, "the only thing missing is a servo amplifier, which is an electronic circuit you can buy off the shelf. The problem was we needed some means of feedback so the servo amp could talk to the Futaba transmitter, in order for them to 'compare' where a limb is supposed to be. Fortunately, Bob Wilcox was able to design an interface between the Futaba receiver and the DC actuators.

"Since No. 5's drive train uses Servodynamics 3/4 horsepower 100 volt servomotors, one on each of his tractor treads, Bob Wilcox also had to design a digital-analog converter to take the signal out of

10 years

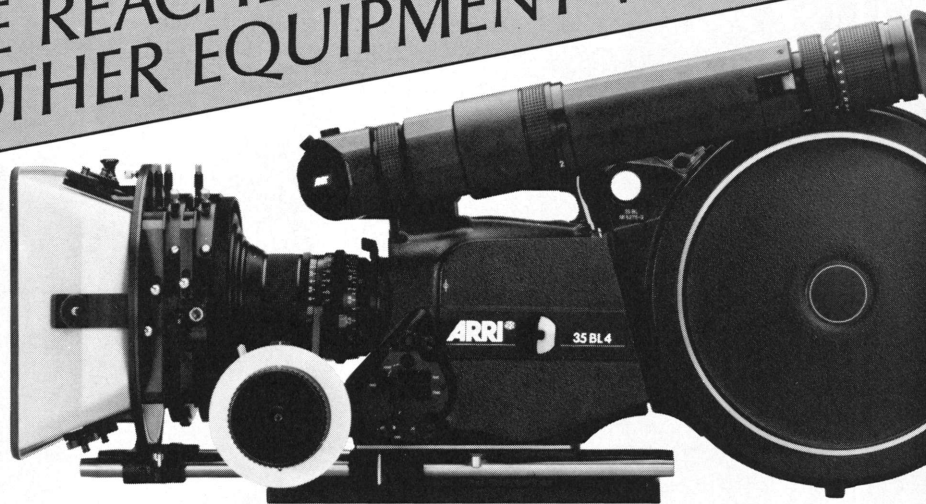
WHEN YOU'VE REACHED THE STAGE
WHERE NO OTHER EQUIPMENT WILL DO.

Renting equipment in New York can often be a dramatic experience. So we at TCS have decided to make things easy for you.

We rent the highest standard of equipment possible, serving all your production needs.

And because we're a smaller-sized company, we're not too big to deliver friendly, knowledgeable and personalized service. On time. And within your budget.

Our latest line includes:



ARRI BL 4 • ARRI 35 III-30 • ZEISS • ANGENIEUX • COOKE • SACHTLER • DENZ • AATON

So when you're tired of the big, impersonal renting arena, rely on TCS. You'll steal the show.



technological cinevideo services, inc.

630 NINTH AVENUE • 10TH FLOOR • NEW YORK, N.Y. 10036

SALES • RENTAL • SERVICE • 212-247-6517

Prime Lens Country.

Beautiful locations are just part of the picture in Wisconsin.

We also offer all the talent, technicians and facilities you need, plus behind-the-scenes help with permits and services.

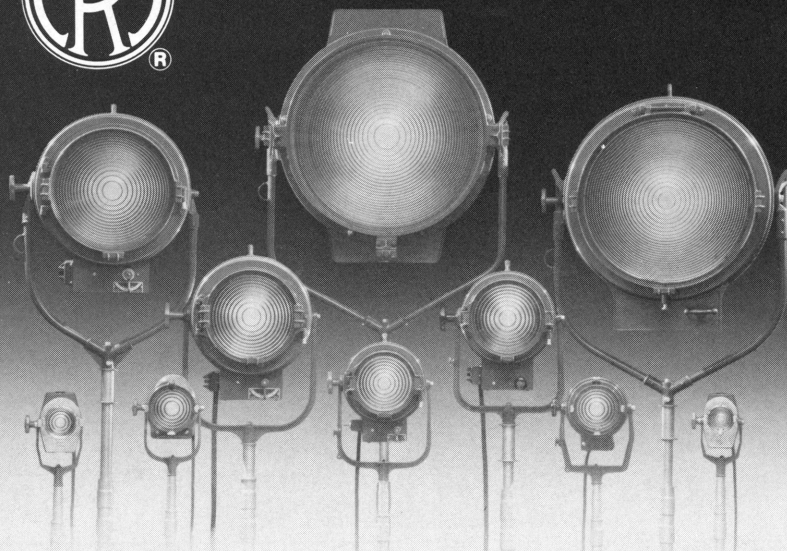
For a free statewide production guide, call or write to the Wisconsin Film Office, P.O. Box

7970, Madison, WI 53707.

It'll bring the whole thing into focus for you.

**Wisconsin
Film Office**
608/267-FILM





Mole-Richardson Co.

61 years of quality lighting—Designers and manufacturers of specialized lighting equipment for the motion picture, television and professional photographic industries.
937 North Sycamore Avenue, Hollywood, California 90038-2384, U.S.A.
TWX 910 321-4615; cable MORINC, Hollywood; FAX (213) 851-5593
telephone (213) 851-0111

IF IT
MOVES
AND
YOU
HAVE
TO
SHOOT IT

IF YOU NEED A...

CRANE ARM CAMERA CAR
INSERT CAMERA CAR
CAR RIGS
TULIP CRANE
3 LIP (PROTOTYPE) CRANE
HONDA GENERATORS
PROCESS TRAILER
WEIGHTLESS RIGS
PROTOTYPE SHOP

CALL
MARC W WYLER
232 E. 81st St. NYC, NY 10028
212-879-8511
914-235-8053

**The Image Bank
& Film Search.**
Representing the finest
Cinematographers
in the world,
throughout the world.

More than ever,
the only stock worth
watching.

THE IMAGE BANK
IMAGE

Headquarters:

111 Fifth Avenue, New York City 10003 (212) 529-6700
Telex: 429380 IMAGE Fax: (212) 529-8886

TIB, THE IMAGE BANK, TIB THE IMAGE BANK and FILM SEARCH
are Trademarks of Fried Kanney Associates, Ltd. (A/K/A The Image Bank)

© 1988 Fried Kanney Associates, Ltd.



232 Madison Avenue, New York City 10016 (212) 532-0600
Telex: 4973657 FILMS Fax: (212) 779-9732

9583 Alcott Avenue, #201 Los Angeles, CA 90035 (213) 550-1947

the Futaba receiver on board the robot and turn it into a signal the Servodynamic amp could understand. Basically all he did was take the Futaba receiver out of the box, take the Servodynamics motors out of their box and design a circuit to integrate the two. No. 5'll do 12 miles an hour and weighs 300 pounds, so you wouldn't want to get in its way. It runs on eight 12-volt batteries, so it's a 96 volt system."

The only problem with using so many electronics off the shelf is that some of the motors were surplus, and are now becoming scarce. "If we get into *Short Circuit 3*," Allard shrugs, "we'll have to redesign some of the axes because now we're running out of servos."

Shooting on the streets of Toronto proved to be relatively uneventful, considering the enormous complexity of the task Allard and his crew faced. "One thing that was really neat about this film is we shot it right in the city and people's reactions to seeing this robot were pretty amazing."

Sometimes the robot's reactions were pretty amazing as well, especially when he got soaked by the frequent rain. "We had a lot of rain in Toronto, and it got to be a problem," Allard admits. "For the most part, the robot will work fine in the rain, but after awhile, everything gets wet. One time his waist axis just started spinning, so we had to shut him off and call it a day. That was nothing compared to the time on the first film we shot for two weeks with the robot in the rain, and at the end of the two weeks, he literally ran away and we had to chase him down!"

Allard credits his excellent crew with pulling off the monumental task of recreating No. 5 even better than his fans remember him. "It was all in the crew," he acknowledges, "we're only as good as they are. Mike Sorenson was instrumental in the mechanical design and Jas Guidachek also did a lot of work. Phil Barto has always been my lead man in terms of organizing and making sure that the robots were there when they were supposed to be.

"Our puppeteers were really excellent, a pleasure to work with. They were Canadian citizens living in Toronto, which was one of the reasons we went with them, but I think on any film we did from now on we'd try to get them back because they were real professionals. Trish Leaper manipulated the eye flaps and all the intricate baubles on the head. Gordon Robertson was in the telemetry suit and either Mike Soren-

Cameras
BY
Wolfgang

ARRI 

φ 35 BL4s

WORLD CLASS ARRIFLEX RENTALS

ROESSEL



CINE PHOTO TECH

NEW YORK **ATLANTA**
718/424-1600 404/451-5051

TAKE Advantage OF CALGARY

Great film crews, (with feature, TV, Movie of the Week, commercial and episodic experience), incredible locations and excellent international airline services. We have no retail sales tax or restaurant tax ... but the special benefits of Calgary are locations, long sunny days and first class cooperation!

The gleaming high rise office towers of this modern metropolis are within an hour's drive of rolling foothills, desert badlands and majestic Rocky Mountains.

We love making films and show it by offering second-to-none cooperation, almost guaranteeing your shooting will be done ahead of schedule.

For further information
on shooting in Calgary contact:

David Parker, Manager,
Film Services Office,
CALGARY ECONOMIC DEVELOPMENT AUTHORITY,
P.O. Box 2100, Station M,
Calgary, AB T2P 2M5
CANADA
Telephone: (403) 268-2771



LONDON INTERNATIONAL FILM SCHOOL



Hollywood, Athens, Tokyo, Lagos, Rio, Tel-Aviv, Reykjavik, Sydney, Toronto, Geneva, Hong Kong, London – just some of the centres worldwide where our graduates are making films.

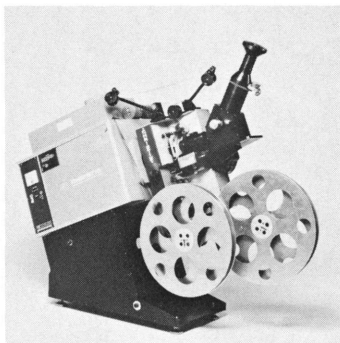
Students from over thirty different countries come to the heart of London's West End to take our two year Diploma Course. Experienced professionals teach all aspects of film making – covering studio feature and location documentary productions in 16mm and 35mm.

Teaching of scriptwriting, direction, camerawork, sound recording, editing etc. ensures a high degree of professionalism. And it must do – Governments, T.V. Networks and Educational Foundations have been sending personnel to us for training for over twenty years.

This intensive Course, demanding hard work and commitment, produces over twenty-five films each term – many students working on more than one production.

There are fresh intakes in January, April and September.

**Contact: The Administrator, London International Film School, Department AC2
24 Shelton Street, London WC2H 9HP, England. Telephone (London) 01-836 0826**



THE RADIANT SYSTEM

35mm Hemispheric
Projection on your
30 to 65 foot
diameter dome.

contact

THE RADIANT GROUP, INC.

9930 East Bunker Hill Place
Tucson, AZ 85748



THE RIGHT CHOICE
BEAUTIFUL LOCATION

SHOOT in TAIWAN
R.O.C.

FANTASTIC SAVINGS GREAT SHOTS
FOR YOU NEXT MOVIE, COMMERCIAL OR MUSIC VIDEO
COMPLETE PRODUCTION SERVICES

EQUIPMENT RENTAL

ARRILITE

ARRIFLEX PANSHERON

ARRIFLEX-3 35mm 130fps

ANGENIEUX. COOKE ZOOM

PRECISION SPEED CONTROL

TIFFEN, ARRI H.M.I. LIGHTS

ZIESS SUPER SPEEDS LENSES

CRYSTAL HIGH SPEED CONTROL

CALL or WRITE

阿榮企業有限公司

Arrow CINEMATIC GROUP

NO.135, CHOW-CHOU ST., TAIPEI, TAIWAN, R.O.C.

TELEPHONE: (02) 3219743 • 3965340

son or myself drove the robot. Rob Mills controlled the eye and head movements and did the voice for the production shooting."

Once the film was finished shooting, Tim Blaney, who had established the voice of No. 5 in the first film, dubbed over all of the robot's lines. "He really did a good job," Allard smiles, "he always had a lot of spontaneous remarks. One of the nice things about making a film with No. 5 is that as long as the lights are blinking in his mouth, we could have the robot say anything, so we could go back in and change lines."

While playing with lifesize functional toys like No. 5 sounds like a lot of fun, it was! "Actually, it was a lot of work," Allard corrects. "Something like No. 5 is just logistically such a complicated thing to pull off. We had 11 men on the robot crew, six men on the effects crew and six support people and three puppeteers. There were more than 100 lineal feet of robotic and special effects trucks – it was just a huge undertaking. I was pretty trashed by the end of the picture." △

Congratulations!

Nominations for Emmy awards by the Television Academy have brought honor to a number of ASC members. The winners will be announced at the August 27th 40th Annual Emmy Awards presentation.

Nominees for a series are: Roy Wagner, ASC, *Beauty and the Beast*; Pilot; Ted Voigtlander, ASC, *Highway to Heaven*, "A Dream of Wild Horses;" John C. Flinn, ASC, *Magnum PI*, "Unfinished Business;" Gerald Perry Finnerman, ASC, *Moonlighting*, "Here's Living With You;" Richard Rawlings, Jr., ASC, *O'Hara*, "See Something That Isn't There;" and Edward Brown, ASC, for *Star Trek, the Next Generation*, "The Big Goodbye."

Nominees for cinematography of a miniseries or special: James Crabe, ASC, *Baby M: Part I*; Woody Omens, ASC, *I Saw What You Did*; Stevan Lerner, ASC, *Inherit the Wind*; and Phil Lathrop, ASC, *Little Girl Lost*.

MEXICO

PRODUCTION FACILITIES IN MEXICO

ARRIFLEX 35 Cameras

Cooke/Zeiss Lenses

RONFORD/SACHTLER Heads

SONY Video Equipment

TYLER MIDDLE & NOSE MOUNTS

Steadicam/CAR RIGS

LTM/Ianaro HMI Lighting

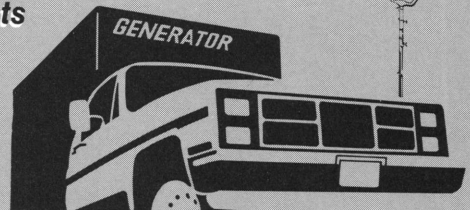
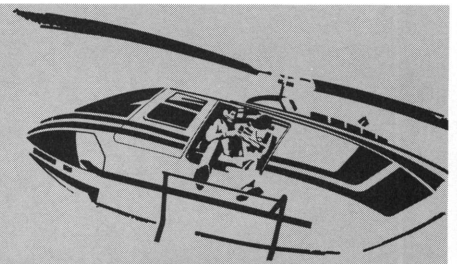
LTM/MOLE RICHARDSON Lights

BEBEE Generators

TULIP Crane

ELEMACK Dollies/Arms

Mathews Grip Equipment



RENTA IMAGEN

CERRADA DE BEZARES 90, LOMAS DE BEZARES, 11910 MEXICO, D.F.

Telephone: (905) 570 3802/FAX (905) 570 5064

IN HOLLYWOOD, PHOTOGRAPHIC FILTERS ARE TOOLS TO SOLVE PROBLEMS!

The Mystery of Filters II, an educational manual on photographic filters, is written in SIMPLE, DOWN TO EARTH LANGUAGE, by the pioneering company who, for over 50 consecutive years, has manufactured and supplied light transmitting filters for the HOLLYWOOD STUDIOS.

Learn the real facts about HOW and WHY filters are used by the top Cinematographers. Learn the difference between FILTERS, EFFECT FILTERS, REGULATORS, SENDERS & RECEIVERS, and INSTRUMENTS.

This manual is an excellent buy at \$14.95, and as a bonus, those who register their manuals with Harrison will receive all future up-dates and insertions at no charge.

Call or write your order today. Learn the facts about photographic filters used by the professionals.

Harrison & Harrison
P.O. Box 1797 • Porterville, California 93258-1797
Phone: (209) 782-0121 • Cable: HARALINE

PLEASE SEND _____ COPIES
OF THE MYSTERY OF FILTERS II,
AT \$14.95 EA. POSTAGE PAID.

NAME _____

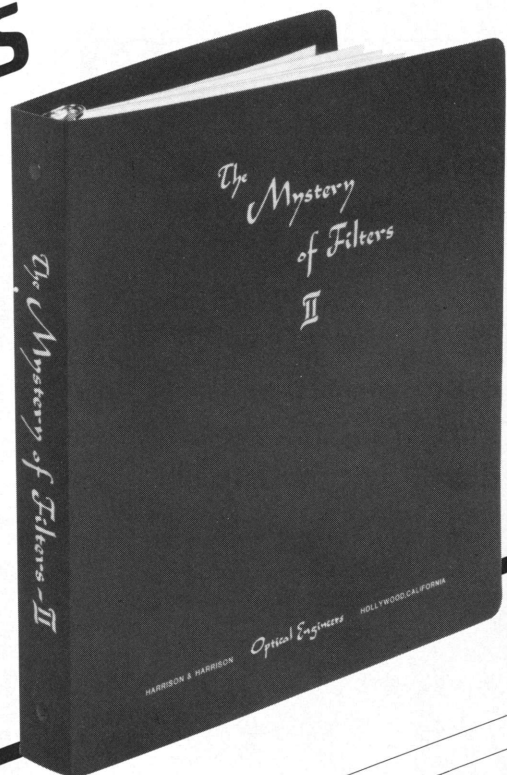
ADDRESS _____

CITY _____

STATE/ZIP _____

COUNTRY _____

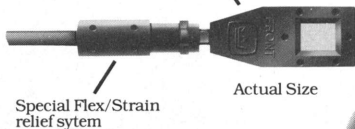
California residents
add sales
tax.



IN THE MOVIES IT PAYS TO BE INVISIBLE

When it's best to operate undetected, when placement is critical —

Rugged, resilient material resists damage from demanding professional use.



Special Flex/Strain relief system

Actual Size

invisibility has its own rewards — precisely why the GLM Series is so well suited to motion picture sound.



THE INVISIBLE MAN™ RETURNS

Many features have been designed into this unique system to solve common problems inherent to the business; placement, concealment and reliability.

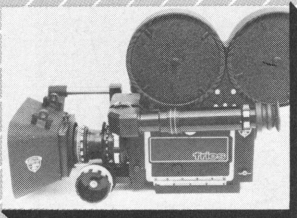
An accessory for every application is at your disposal, see your Crown dealer for more information.

™ & © 1940 Universal Pictures Co., Inc. All rights reserved. Licensed by Merchandising Corporation of America, Inc.

Crown INTERNATIONAL, INC.

1718 W. MISHAWAKA RD, ELKHART, IN 46517

MODERNIZED EQUIPMENT FOR MODERNISTIC FILMMAKERS



35R Beamsplitter reflex conversion to the Mitchell Std./High Speed camera. Features include interchangeable lensmounts, film clip viewing, orientable viewfinder, video assist, high-speed/crystal/single-frame motor.



AF35R Follow focus beamsplitter reflex conversion to the Mitchell Std./High Speed camera for computerized motion control. Features include 4" bellows focus travel, lead screw drive, internal capping shutter, choice of lensmounts, orientable viewfinder, film clip viewing, video assist, and high speed/crystal/single frame motors.



35R3 Rotary mirror reflex conversion to the Mitchell Std./High Speed camera. Features include interchangeable Arri, BNC-R and Nikon lensmounts, orientable viewfinder, video assist, and a high-speed/crystal motor.



120M2 is an "all-in-one" motor for the Mitchell S35R/Mark II. Features include 4 to 120 FPS, crystal 24/25 or 24/30 FPS, forward and reverse, auto mirror positioning, remote single-frame, intervalometer, strobe triggering and TV sync.

MOTION CONTROL

HIGH SPEED

INSERTS

TIME LAPSE

SPECIAL EFFECTS

VIDEO ASSIST

Fries Engineering Inc. 12032 Vose Street, North Hollywood, California 91605 Phone (818) 765-3600 Telex 4720922

fries
Engineering

Computer Revolution for Sound

by David Heuring

At the dawn of the computer age, experts promised a swift and complete revolution in all aspects of life. While the computer revolution has made sweeping changes in many areas, it has been somewhat slower and less pervasive than many anticipated. The fault lies not with the technology itself; certainly the capabilities far outstrip most of today's practical computer applications, which take only slight advantage of the computer's mind-boggling potential. Much of this lag can be blamed on what is known as user interface.

User interface problems occur when a person has trouble getting the computer to do its job. Standing in line at the hardware store while three cashiers and a manager spend 15 minutes trying to ring up a hammer can make one year for the days of plain old cashboxes, and perhaps think of new uses for the hammer. User interface problems can change a tool into an enemy.

Computer technology's infusion into the motion picture field has had its problems in this area. In the field of film sound, for example, recent developments have been nothing short of revolutionary. The veteran sound editor, however, may be loath to adapt his or her successful habits and techniques, even though the new digital sound technology offers a much higher degree of control and sound quality.

Lexicon, Inc., in the design of their Opus digital audio production system, has attempted to combine the best of both worlds by incorporating the latest in technology while making efficient user interface a priority. Opus is the first digital audio editing system developed specifically for film and video sound. "The goal was to give the experienced sound man an editing tool with which he could feel comfortable immediately, and at the same time offer him the benefits of computer aided digital audio technology," says Rod Revilock, manager of marketing and product development for Lexicon. "We wanted to use concepts that are



fundamental to this particular marketplace. A lot of other systems use devices such as a mouse to control interface. From a broad-base standpoint, a mouse is a great interface tool. But for someone who's used to picking up a razor blade and turning a reel on a tape machine, or using a Moviola, a mouse is a completely new thing to learn."

Working in digital audio results in vastly superior sound quality and pinpoint editing control. Until recently, however, digital technology hasn't made major inroads in the film soundtrack field, for a number of reasons. Most digitally recorded film audio is currently transferred to analog media for editing purposes. "The first editing systems for digital audio were based on video technology, and as a result, used videotape as a storage medium," explains Revilock. "Although this technique allowed the superior sound quality of digital, it brought time-consuming and unfamiliar mechanics to the

editing process. Then we started to see digital audio showing up on open reel machines, which allow you to edit in a much more conventional manner – you can actually mark the tape and cut it with a razor blade. This technique permits the speed of conventional open reel editing while retaining digital sound. Obviously, the increased signal quality is a plus, but in terms of the actual editing process, you're still replicating analog, without taking advantage of the potential of digital."

The next step in the evolution came when digital audio began to be stored on magnetic hard disks, rather than on linear media, such as video or audio tape. Randomly readable magnetic disks of the type found in computers acquired the speed and capacity necessary for edit-speed sound storage and retrieval. In the fast moving world of computers, this technology has been around for a while. It is now becoming

Lexicon Opus digital audio editing system. Note normal sound board setup on the left of the console, and scrub wheel in the foreground. Time code references and scrolling visual representations of each audio track are displayed on the monitor.

Dress For The Part!



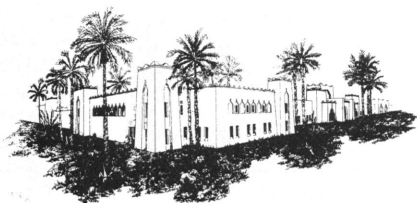
Ten stylish T-Shirt designs plus over 25 exciting gift items including caps, pins, clocks, scene slates and more are available for the Film and Video Professional. Make us your gift center – call or write for your free brochure to:

ALAN GORDON ENTERPRISES, INC.
1430 Cahuenga Blvd., Hollywood, CA 90078
Telephone (213) 466-3561 • (818) 985-5500
TWX: 910-321-4526 • Cable: GORDENT



Atlas Corporation Studios

presents
"ESPACES CINEMATOGRAPHIQUES"
of Ouarzazate, Morocco



You can find:

A complete image library including:
villages, deserts, Kasbah, traditional houses, etc...

General information and price list for:
construction materials, movie equipment.

Technical equipment available:
Landrover for scouting - Electrical generators -
Stainless steel tanks - Wind machines -
Mobile homes - Trucks

Office space with telephone and telex, carpenters
workshop, plastering plumbing, painting.
Hotel reservation: a service throughout the country
in the "SALAM HOTELS" finest 4 and 5 star hotels.
Catering service.

Contact:

in France
59, rue Saint-Didier - 75116 PARIS
Tel. (33) 1 47 55 09 09
Telex 648224 F - Fax 47 55 08 32

in Morocco
Boulevard Mohamed V - OUARZAZATE, Morocco
Tel.: (212) 88 22 06 - 88 24 16 - 88 23 93
Telex: 740 49

more economical for the audio business, and audio manufacturers are beginning to exploit it.

In the digital domain, sound (or any other information) is broken down into the smallest possible bits of information, represented by zeros and ones. Stored on the hard disk, these "bits" of information are immediately accessible at any time. A gunshot, for example, is digitally recorded in the field or selected from an RDATE (digital audio tape) library. The sound is then stored on the disk in a "safe segment". The editor can alter or "process" the sound in any number of ways – make it longer, shorter, louder or softer, add reverberation, depth, or Doppler. He can change the illusion of its spatial relationship to other sounds, control the abruptness of a fade in or fade out, et cetera.

Of course, the editor is able to control all of these elements with analog. The revolutionary aspect is that with the digital editing system, he is able to control them without winding and rewinding the tape, without cutting and rerecording. With Opus, the editor can make these changes while remaining in the digital domain, eliminating the sound quality loss inherent in multigenerational analog mixing. He can produce any number of combinations of sound and audition them for himself or his superiors, and still retain the original "safe seg" on the disk.

For each playback, the computer refers to the safe seg, and its memory applies the specific alterations to the sound. As a result, the same gunshot can be used one time or 100 times in the soundtrack, each time with different sound characteristics, and use the same amount of disk space. All elements of a soundtrack recording (dialogue, music, ADR, Foley, special effects, etc.) can be adapted, combined, edited, auditioned and executed using the system. Up to eight tracks may be recorded to or played from the disk at once, while the computer can store and edit up to 99 tracks on a given reel. This feature allows the editor to edit across all tracks at once. If a scene is dropped, for example, the editor can delete the entire corresponding audio with one command. In most systems, the editor would be able to delete only two tracks at a time.

The system includes a computer screen cue sheet, an organizer which keeps the editor informed of job, reel, and track, foot and frame, and time code numbers. The editor can instantly call up any sound or

piece of soundtrack by time code, eliminating time-consuming rewind and reel search. As the sound plays back, the components of the soundtrack are represented on the screen by labeled ("Jane's footsteps" for example) linear segments which scroll by, displaying their time interrelationships in a moving graph. A vertical line through the graph represents the editing point. Built into the Opus is the ability to read and synchronize to any of the major time code formats or pilotone-type field systems. Video screens with time code burned in allow the editor to follow picture in the normal fashion, while the Opus locks into the time code as soon as the videotape reaches speed.

Opus' editing systems are conceptually similar to those of a word processor – but they work with sounds instead of sentences. Sounds may be marked, lifted, moved, replaced and swapped. The loop command creates the digital equivalent of a tape loop, with specified start, end and duration. Dialogue may be stretched or shortened, have syllables removed or added, and be perfectly matched to picture. The sound of a jet taking off may be given perfect length, exact stereo configuration, and proper tail-off or cross-fade in a matter of minutes. With the scrub wheel, the editor has pinpoint control of the placement, beginning and end of a sound, with resolution accuracy down to the digital sample, the actual "ones and zeros" on the disk. Resolution increments in terms of frame divisions (tenths or even hundredths of a frame) are almost ridiculously huge by comparison. He can try many different versions, make mistakes, or change his mind without losing his original safe segs.

Some of the technology behind these applications is new; some of it not so new. Very little of it is in widespread use in current film sound editing and production. The designers of Opus knew that the success of the system depended on their ability to present the technology in a user friendly manner. Again, few established sound editors are interested in learning an entirely new way of doing their job.

As a result, the Lexicon Opus system has a familiar look, uses familiar terminology, and is operated in a manner familiar to experienced sound editors. Typical digital editing systems have a separate screen and menu for mixing; Opus mixing can be done at any time during production, with a normal board setup. Technically, terms like reel, track, and rewind are outdated, but they are retained to facilitate user

interface. The editor turns a knob on the board, and the sound takes on a more resonant bass. Although everything between those two points is accomplished through a sophisticated applications program, the editor feels comfortable.

The Opus is capable of completely digital production, but does not require it. An analog signal can be brought into play, and any analog processing can be easily worked into the procedure if so desired. The final results can be in any format, from monaural to eight discrete channels. Channels can be downloaded eight at a time to a 24 track, film reels, or whatever is required.

Blue Light Sound/Illusions in Sound of Burbank has purchased one of the first Opus systems and has built a facility to take advantage of the wide range of options it gives them. As an Academy Award-winning sound editor (for effects in *Back to the Future*) and owner of Blue Light Sound/Illusions in Sound, Bob Rutledge sees Opus as the editing tool of the future. "They've done their homework for this," he says. "The left side looks just like a plain old, standard mixing console - faders, mutes, pan pots, input/output switching, sends, phase, et cetera. Anyone in the sound business can relate to that. But it's totally digital. If we want a certain type of analog processing, we can also do that. The hands-on edit functions mean that it doesn't require a computer programmer to operate it. An editor that is used to old equipment feels very comfortable with this. Really, the only thing that an editor does differently is to use the keyboard input for changing labels."

Blue Light's project engineer, David Masnica, agrees: "Opus allows us to completely sidestep the entire analog process. For *The Witches of Eastwick*, we dubbed in digital, recorded the effects in digital, but we had to go to analog transfer, and predub back to digital. So it wasn't truly digital. With the Opus, we go to the stage without multiple generations, incredibly clean, with the soundtrack exactly the way we did it here."

The most readily apparent benefits of a digital editing system are a superior level of quality and hours of saved time. Saving time, however, may be an interesting issue to the owner of a facility who rents by the hour. "Owners may not necessarily cherish the idea of booking less studio time," says Revilock, "and there's only a certain amount that you can charge for a room, no matter what's in it. But the Opus

FILM CHANGING TENT



The Film Changing Tent replaces the "black bag" for loading motion picture film, as well as large format sheet film. The exterior poles assemble quickly to provide a lint-free, spacious interior. Not as hot as the usual changing bag, and lots of room. The outer tent fabric is reflective and water-resistant, and the inner fabric, of course, is light proof. The tent measures 36" x 27", and weighs less than 3 lbs. A stuff sack is included. The tent sells for only \$180.00. Add \$5.00 shipping & handling. CA residents add 6.5% Sales Tax.



BIRNS & SAWYER, INC.

1026 N. Highland Ave., Hollywood, CA 90038 213-466-8211
FAX 213-466-7049 TELEX 673280 Cable BIRNSAW

WET GATE

- for Bell & Howell C-Printer
- for Rank Cintel Mark III Telecine
- for Bosch FDL 60 Telecine

- B & H C-Printer (sec. hand)
- Rebuilding set for B & H C-Printer from 16 mm of 35 mm with Wet Gate



Andreas Schmitzer

Rebenweg 41,
D-8420 Kelheim
West-Germany

Phone: (09441) 1539
Telex: 65449

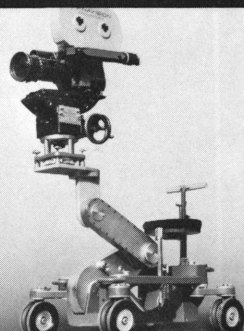
Chapman / Leonard Studio Equipment

TIME SAVING CAMERA CRANES AND DOLLIES

- | | | |
|--------------|-----------|--------------|
| • SUPER NOVA | • ZEUS | • SIDEWINDER |
| • TITAN | • NIKE | • HYBRID |
| • APOLLO | • ELECTRA | • HUSTLER |
| • OLYMPIAN | • PEEWEE | |

(213) 877-5309

(818) 764-6726



Superedit Introducing SUPEREDIT SE-1600 FLATBEDS



A high-technology, "avant garde" 16 and SUPER 16 post-production and direct release system/lab.

With these advanced features:- editing, mixing, resolving, transfers in-and-out, high-speed recording, dubbing, digital transports and speed control, application of magnetic stripe on either side, time-code interlock.

Available shortly: video assist, splicing robot for editing and conforming.

For more information, write to:
SUPEREDIT, 2645 PAULUS, MONTREAL, CANADA
H4S 1E9 or telephone: (514) 334-1449

rosco

36 Bush Avenue, Port Chester, NY 10573
1135 North Highland Avenue, Hollywood, CA 90038

SINGLE FRAME MOTORS & INTERVALOMETERS

- 12 to 24 VDC power.
- Crystal controlled multiple shutter speeds — 1/16 sec. to over 8 min. time exposure (8,194 possible).
- Intervals from 1 fps to 60 hrs.
- Burst feature 1 to 15 frames per pulse.
- LED frame counter.
- Forward/Reverse operations.



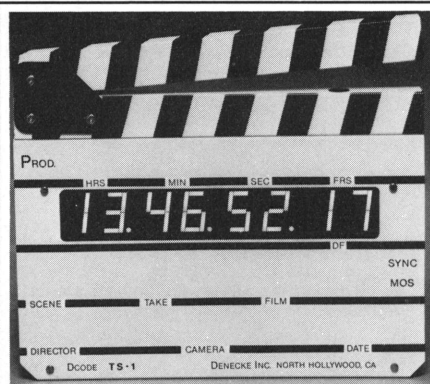
TL16SR SYSTEM

SINGLE FRAME SYSTEMS

FOR: Arri 16S & M • Arri 16SR
• Arri 35IIC • Arri 35III •
Bolex REX 4 & 5 • Mitchell
16mm • Mitchell S35R, MK II
• Mitchell 35 High Speed •
Mitchell BNC • AP65MM •
IMAX
ACCESSORIES: 3" & 5" Cap-
ping Shutter • AC Power
Control Unit • Strobe
Triggering Device

NORRIS FILM PRODUCTS

1014 Green Lane • La Canada, California 91011 • (818) 790-1907 • FAX (818) 790-1920



DCODE™ TS-1 TIME CODE SLATE

FOR FILM AND VIDEO

- EASY TO USE —
- RUGGED & LIGHTWEIGHT —
- SIMPLE ONE-HANDED OPERATION —
- HIGH INTENSITY ONE INCH LED READOUT
- CLAP-ACTIVATED DISPLAY FUNCTION —

5417 CAHUENGA BLVD. 'B' • (818) 766-3525
N. HOLLYWOOD, CA 91601 • FAX 818-766-0269

DENECKE, INC.

CINEQUIPT RENTS AND SELLS

lowel 

CINEQUIPT INC.

VIDEO & FILM EQUIPMENT
SALES AND RENTAL

856 Raymond Avenue, St. Paul, Minnesota 55114

(612) 646-1780

can result in a better product. The saved time can be spent paying more attention to details, being more picky, and searching more possibilities to find exactly what they want. They can audition any number of options without running through a lot of prints. Of course, to the people who contract projects, time-saving is of paramount importance."

In the near future, Masnica expects further developments. "The next step will be to have the picture in digital form, on laser disk," he says. "Since the laser disk has random access, there is no ramp time, no waiting to find the sequence you're looking for. Just punch in the time code, and it will go anywhere, instantly. Right now, there's not a good permanent medium. Within about four months, though, I'll be able to get a dependable laser disk transfer from a Telecine or a Rank Cinetel or a Bosch, which will be easier to work with and much cheaper than making several work prints. There are already several laser editing houses in town for picture, so it's only a matter of time."

A trip to the average local theater can make Stephen Handzo's words ring painfully true: "For much of its history, the motion picture theater offered sound equal or superior to that heard anywhere. The Vitaphone disk of the 1920s was a precursor of the LP in that it used the modern record speed of 33 1/3 and lacked the abrasive that produced surface noise in phonograph records of the day. In the early 1930s, the first general use of the term "high fidelity" was in reference to RCA's improved optical sound system. The two-way woofer/tweeter arrangement of theater speakers set the standard for the high-fi revolution of the 1950s. Cinerama, CinemaScope and Todd-AO inspired stereo LP's, many of which were first soundtracks, e.g. *Around the World in Eighty Days*. For many reasons, the quality of film sound began to decline, and by the 1970s the average teenager had a better sound system in his bedroom than the the local theater." — (*Film Sound Theory and Practice*, Columbia University Press, 1985)

Motion picture sound has some catching up to do, but perhaps with the advancement of digital and computer technology, its adaptability to the sound editor, and imaginative application to motion picture soundtracks (and some help from theater owners), film sound can begin to regain its position on the crest of the sound "wave". Now if they could only solve the problems at the hardware store... △

VideoGram

by Mike Maginot

Home video is a smorgasbord providing infinite variety for audio/visual gratification. Half inch cassettes continue to proliferate, but laser technology is pushing forward, spurred on by the ever increasing popularity of the compact disc and the recent introduction of combination players that track compact discs, CD-videos, and laser discs. Cross format fertilization has even cropped up, a recent video cassette release, *Joe Jackson: Live In Tokyo*, includes a three inch compact disc as a promotional item.

The many persuaders that laser disc manufacturers add to their releases – trailers, still libraries, historical commentary, letterboxing – make it hard for collectors to resist. Any audiophile who has heard a favorite film or music video over a laserdisc system with surround sound is one step closer to another piece of video hardware. When players that read both sides of a disc without interruption and hold multiple discs begin to appear, even continuous cassette enthusiasts may show some interest.

• • •

The Lost Weekend
Produced by Charles Brackett.
Directed by Billy Wilder.
Photographed by John F. Seitz, ASC.
(MCA Home Video)

Brackett and Wilder's adaptation of Charles B. Jackson's novel is still one of the finest films ever made about addiction. Ray Milland's performance as an alcoholic writer who can't get started is the highlight of his career.

Miklos Rozsa's score haunts the viewer like the bottle haunts Milland. Seitz's sensitive cinematography shines as it does in so many classic B&W films.

• • •

Orphans
Produced and directed by Alan J. Pakula.
Photographed by Donald McAlpine, ASC.
(Lorimar Home Video)

There is a warm glow over the proceedings that take place in *Orphans*.

Donald McAlpine's camerawork complements Pakula's direction of Albert Finney, Matthew Modine, and Kevin Anderson, as it seems to be obsessed by their every move.

Lyle Kessler's screenplay, based on his stageplay, opens the story up, but doesn't lose emphasis on his quirky characters. The interiors and exteriors are perfectly integrated visually, but still give off that air of the theatrical one associates with Warner Bros. stage adaptations from the thirties. Not odd considering Finney's introductory discourse on *Dead End Kids*.

• • •

The Three Worlds of Gulliver
Produced by Charles H. Schneer.
Directed by Jack Sher.
Photographed by Wilkie Cooper.
(RCA/Columbia Home Video)

Ray Harryhausen's follow-up to *The Seventh Voyage of Sinbad* is bad Jonathan Swift, but good Saturday matinee stuff. Kerwin Mathew, this time in the guise of Gulliver, must deal with little people, giants, and an unruly over-sized crocodile.

Colorful costumes, unusual perspectives, a Bernard Herrmann score, and many magical moments make Gulliver's worlds worth a video visit.

• • •

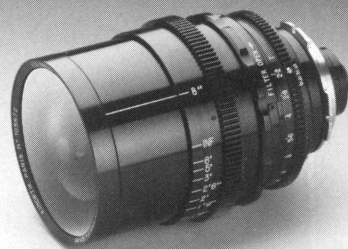
Cry Freedom
Produced and directed by Sir Richard Attenborough.
Photographed by Ronnie Taylor, BSC.
(MCA Home Video)

Kevin Kline and Denzel Washington portray journalist Donald Woods and South African civil rights activist Stephen Biko in this intense indictment against apartheid.

Sir Richard Attenborough has again chosen to deal with ideas and ideals. As in *Gandhi*, we are presented with a character whose actions are bold enough to stir the hearts and minds of a nation.

John Briley's adaptation of Woods' two books, *Biko* and *Asking For Trouble* offer the actors some wise dia-

Century 9.8mm Kinoptik Revitalization.



Century's extensive modification makes existing 9.8mm, T2.2 Kinoptik 35mm lenses fully compatible with today's cameras and accessories.

Extensive Evaluation & Optical Care □ New Focusing Mount & Aluminum Housing □ Focuses to 1" □ Integral Follow Focus Gear □ Large, Clear Engravings □ Choice of mounts: Arri PL or BNCR (stainless steel). □ Utilize Existing Accessories: Retains original front diameter. □ Accepts 2x2" Glass Filters □ Optional .7X Wide Angle attachment converts lens to 6.8mm.

Call Jeff Giordano for details.

Century precision optics
A DIVISION OF CENTURY PRECISION INDUSTRIES, INC.

10713 Burbank Bl., N. Hollywood, CA 91601 Ph: (818)766-3715
FAX: (818) 505-9865 TLX: 066-2419 CENTOPTICS LSA

NEW !

STANTON JIMMY JIB

"GIANT"

With this extension kit you can convert your standard "JIMMY JIB" II into a Giant 20 footer in only a few minutes.

JIMMY JIB II \$2995.00
Remote Head Kit \$3500.00
Giant Extension Kit \$975.00



VIDEO SERVICES UNLIMITED
2720 E. Thomas Rd. Bldg. A
Phoenix, AZ 85016
(602) 224-6162

Make A Change For The Better.



Introducing the original film changing tent. The 1½ lb. darkroom that sets up in seconds. The open interior gives you the space you need to load and unload faster, without frustration. And the silver exterior keeps you cool and comfortable.

Ask your camera equipment supplier about the original **Harrison Film Changing Tent**. It'll make your clumsy old black changing bag look like a relic from the dark ages.

The Harrison Film Changing Tent



Contact **Camera Essentials** for more information and pricing.

4391 Sunset Blvd. Suite 352 Los Angeles, CA 90029 (213) 666-8936

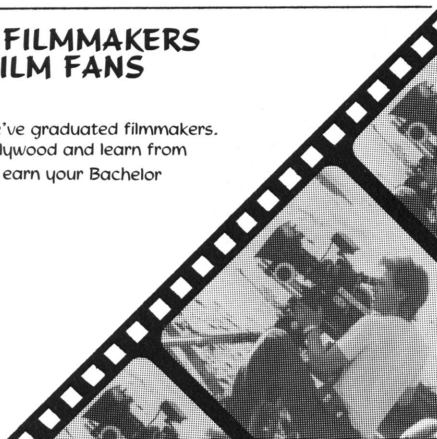


WE MAKE FILMMAKERS NOT FILM FANS

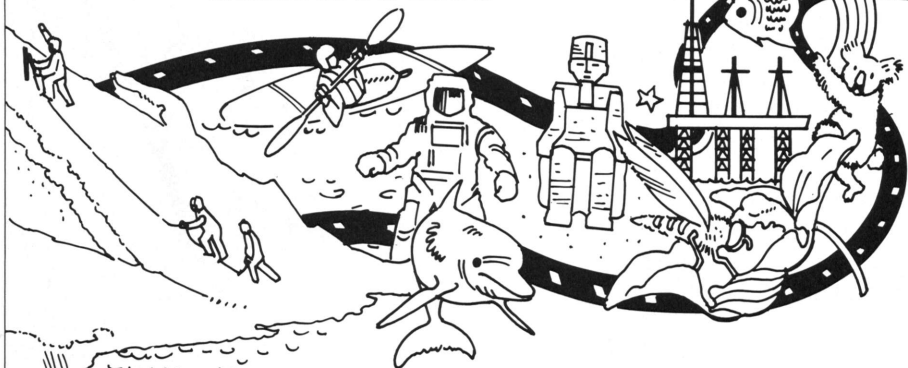
For 34 years we've graduated filmmakers. Study cinema in Hollywood and learn from the professionals as you earn your Bachelor of Arts degree.

COLUMBIA COLLEGE
925 N. La Brea Avenue
Hollywood, California 90038
(213) 851-0550

Financial Aid Available



How to send your audience around the world without sending a film crew first.



Want to hire a Viking horde? Need an octopus as an extra? Or a crocodile's-eye view of the Nile?

National Geographic is the answer. We've got two million feet of full-color stock footage. Everything from polar icecaps to Polynesia. All with the kind of award-winning quality you've come to expect from us.

Why spend hundreds of hours—or thousands of dollars—getting the shot you want? Pick up the phone right now and we'll have the footage you request on a 3/4" U-matic videocassette and off to you faster than you can say, "That's a wrap." And a lot cheaper, too.

National Geographic Society Stock Footage Library

Washington, D.C. 20036. Phone 202/857-7659
Cable: NAT. GEO. WSH, Telex 892398 NAT. GEO. WSH.



logues on human rights, but doesn't lack a sense of humor. The plot moves forward with the agility of an Olympic torch bearer, as the issues pass from hand to hand.

Ronnie Taylor's cinematography adapts well to video, providing the home-viewer with an epic intimacy not to be found on the big screen. The quest for individual freedom is a shadowy affair offering Taylor many moments to demonstrate his mastery over light.

...

The Indomitable Teddy Roosevelt
Produced and directed by Harrison Engle.
(Prism Entertainment)

Exhaustive research has gone into this video that was originally broadcast on national television. Utilizing a combination of stock footage and newly shot recreations, Engle has brought to life one of America's most intriguing individuals.

Muted tones were used in the re-creations, featuring Roosevelt's actual descendants, to facilitate smooth transitions and in keeping with the look associated with the time.

George C. Scott narrates from Theodore Strauss' script, appropriately backed by the music of John Philip Sousa. Look-alike Bob Boyd becomes Roosevelt in the dramatized moments, blending well with the real Roosevelt in historic footage.

...

VIDEO TECH: *Controlling the Image* and *The Art of Using Filters* are two excellent videos demonstrating advanced videographic technique available from First Light Video Publishing. Hosted by Harry Mathias, the videos are informative and handy reference volumes for the video bookshelf.

Controlling the Image deals with the tools and techniques used to achieve desired effects, with particular emphasis on interpreting the information displayed on the waveform monitor.

The Art of Using Filters demonstrates the many ways filters can be used to enhance a video image and some interesting electronic alternatives for image manipulation.

Another video tech volume currently available is *Camcorder Class* from the Vidinstitute of California. Focusing more on the needs of the amateur operator, *Camcorder Class* is a beginner's course offering little new information to the video pro. You can even send away for a diploma when you finish the tape — or before if you prefer. △

Classified Ads

RATES

Ads set in lightface type are \$1 per word. Text set in **bold face** or capital letters (except first word and advertiser's name) are \$1.50 per word. Remittance to cover cost must accompany copy. Send ad to Classified Advertising, American Cinematographer, P.O. Box 2230, Hollywood, CA 90078. Deadline for copy is **first of second month** preceding date of issue. Subject matter limited to items and services pertaining to filmmaking and video. Minimum \$12 per ad.

EQUIPMENT FOR SALE

ARRI SR camera w/exposure meter, Ang. 12-120mm lens, (2) 400' mags, (2) on board batts, charger, hand grip, bellows matte box w/lightweight support, DIGI-TAC & cases, \$24,000. Call Derrick at WHITEHOUSE A.V. (213) 479-8313.

ARRI 35 2C hardfront package, Cinemascope aperture, BNCr mount, mags, cases, vs motor, cables, \$7,500. CP crystal motor \$1,500. Cinemascope door \$1,200. Crystal controlled Arri blimp 120-S, \$5,000. 2-30v batt belts, \$1,000. J4 CP zoom motor, \$1,500. Flatbase, \$400. 25-250 Ang. zoom, BNCr mount, \$3,500. 9.8 Kinoptik Arri mount, \$1,500. 100mm Kinoptik, \$350. 300mm Kilfitt, \$250. (713) 461-2863.

ARRIFLEX 35 2C (BNC mount hard front) \$4,975. PERFECTONE 35mm CRYSTAL 24 & 25 fps motor for Arriflex 35 2C or B camera, \$1,975. ANGÉNIEUX 25-250 zoom lens perfect, just overhauled, \$3,750. IMAGE DEVICES, (305) 945-1111. FAX (305) 945-1117.

ARRI BL II 1000' MAGS. 2 excellent working condition, \$2,800 each. (801) 378-4182, Leon or Sharon.

PRO VIDEO & FILM EQUIPMENT GROUP SELLS USED EQUIPMENT ON APPROVAL. CALL US. (214) 869-0011.

USED 20-120MM ANGÉNIEUX LENSES FOR SALE. Several to choose from. All overhauled & guaranteed for 1 year. Some HEC coated. Prices from \$6,000 to \$7,500. Contact Jeff Giordano for further details. CENTURY PRECISION OPTICS, 10713 Burbank Blvd., N. Hollywood, CA 91601. (818) 766-3715. FAX (818) 505-9865. TELEX 066-2419. ANS BACK CENTOPTICS.

NAGRA 4.2, 7" reels, perfect, \$4,500. CP16R, 15-150 Ang., 2 mags, batts, charger, case \$4,200. Maier-Hancock 16mm hot splicer, best offer. (213) 666-8648.

ARRI 16m (similar to S but w/gear driven mags) packages (2 avail) 12-120 lens, 2-400' mags, \$4,595 ea. CP16R package, 12-120, 2-400' mags, case, \$5,645. Eclair 16NPR, crystal, 2 mags, 12-120, \$4,370. Canon Scoopic underwater housing, \$750. With camera too, \$1,250. IMAGE DEVICES, (305) 945-1111.

EQUIPMENT FOR SALE

AATON XTR camera. Mint. With lens and many accessories. (213) 659-0722.

8-PLATE, 2 pix ST 928 STEENBECK, excellent condition, \$7,200. **MTE Magna-Tech** electronic 16/35mm magnetic film hi-speed recorder/reproducer Type MD-616 (10,000 series model), \$7,200. **RODE PICTURES INC.,** (204) 947-9037 OR (204) 467-8327. CANADA.

WE BUY-SELL-CONSIGN GOOD QUALITY USED EQUIPMENT. PRO VIDEO & FILM EQUIPMENT GROUP. DALLAS, (214) 869-0011.

SIEMENS 16MM projector, \$495. Arri S, case, motor, mag, batt, \$650. JK Optical printer, \$1,095. Bolex w/25, 50, 75, 300mm lenses, \$995. (806) 381-0575.

16BL ARRI w/12-120, 2-400' mags, Jensen crystal, \$5,750. 16 Bolex w/lenses, \$475. 35 Eyemo body, hand crank Arri mount, \$750. IMAGE DEVICES (305) 945-1111. FAX (305) 945-1117.

ACL ECLAIR, 30/24 FPS variable speed motor, 12-120 Ang. zoom, batt, Barney, \$3,995. SACHTLER 14 tripod/head, \$1,000. ERNEST. (804) 644-9746.

IN-HOUSE TECHNICAL SERVICE MAKES PRO VIDEO & FILM EQUIPMENT GROUP THE BEST CHOICE FOR GOOD USED EQUIPMENT. CALL US IN DALLAS (214) 869-0011.

3-HEADED 35MM upright Moviola (add-a-plate), \$6,000. 3-headed 35mm upright Moviola, excellent cond., \$12,000. KEM Rapid Junior, 6-plate/16 & 35mm picture/sound modules, \$7,000. (313) 552-9057.

FILM LIBRARY FOR SALE. 16 documentary, personal, vintage, current, high adventure, worldwide, nature, poeplis, customs, aeriels, planes, steamtrains, rare subjects, wild sound efx, audio taped timed narration for 24 episodes. More episodes also on site literature; can narrate; intended for a series. Offer. STUART JEWELL, 2040 Garden Lane, Costa Mesa, CA 92627. (714) 548-7234.

MASSIVE 16MM equipment sale. All excellent. Bolex & other equipment. Call for list. (206) 696-3463.

ARRIFLEX 16BL w/12-120, 2-400' mags, Universal motor, case, w/extras, \$4,800. Ralph (718) 284-0223.

USED & RECONDITIONED OXBERRYS, worldwide, animation stands, master series & filmmakers, optical printers, 1200, 1500, 1700, 1900 series all w/aerial heads. In our 30th year of selling & maintaining exclusively Oxberry. We also manufacture new liquitech wet gates w/adjustable stroke for shrunken stock. The world's most widely accepted wet gate. PHOTOGRAPHIC EQUIPMENT SERVICE, INC., 165 Huguenot St., New Rochelle, NY 10801, USA (914) 235-2720.

SUPER 8 PROS! Beaulieu 40082MII 6-80 Ang., alum case, access, Beaulieu 40082MII 8-64 Ang., Universal 808 fluid head tripod, **\$3,000 CANADIAN!** Elmo GS1200 Xenon 5-8, \$2,500 Canadian. (604) 354-4208.

WE HAVE Mitchell BNCr cameras for sale, CSC converted spinning reflex with & without accessories. Call Jeff Giordano for further details. CENTURY PRECISION OPTICS, 10713 Burbank Blvd., N. Hollywood, CA 91601. (818) 766-3715. FAX (818) 505-9865. TELEX 066-2419. ANS BACK CENTOPTICS.

ENERGY PRODUCTIONS

**TIMESCAPE™
LIBRARY**

ENERGY
PRODUCTIONS
2690 BEACHWOOD DRIVE
LOS ANGELES, CA 90068

- Skyscapes
- Cityscapes
- Landscapes
- Special Effects
- Aerial Scenics
- Lighting
- Landmarks
- Underwater
- Computer Graphics



The most extensive collection of original cinematography. Production-ready images available on all formats. FREE CATALOG.

213.462.3310

SCOTT DITTRICH FILMS

ACTION

Sports Cinematography

COMMERCIALS 2ND UNIT

STOCK FOOTAGE LIBRARY

SURFING SKATEBOARDING
WINDSURFING SNOWBOARDING

TROPICAL SCENICS AND MORE.

P.O. BOX 301 MALIBU, CA 90265
(213) 459-2526 (213) 456-1743

EXCLUSIVE SOURCE FOR THE COOKE LENS.

ZGC is America's exclusive distributor of Cooke 16mm camera lenses. And the exclusive distributor of Cooke 35mm lenses in the eastern 2/3 of the country.

We also provide expert maintenance of your Cooke lenses by a factory trained optical specialist. Call or write Les Zellan for a FREE

ZGC, Inc.

57 Plymouth Street
Montclair, NJ 07042
201/746-4428 Twx: 9102508817

**Everything From
A to Z.**

(Arriflex) (Zeiss)

Rent it at the Northwest's only
full-service camera rental house.

Rental/Sales/Service

206 467-8666

**OPPENHEIMER
C A M E R A**

Dreamlight IMAGES



Explore the magical imagery within our **STOCK FOOTAGE LIBRARY**

Production ready elements in all formats:

TIME-LAPSE, HIGH-SPEED, MACRO,
MICRO, REAL-TIME:

suns, clouds, moons, flowers, cities,
aerials, effects, underwater, vintage,
nature, wildlife, sports, etc.

FREE CATALOG

932 North La Brea Ave., Suite-C
Hollywood, CA 90038

213-850-1996

LTM CORP. OF AMERICA

WANTED: USED LTM HMI MK I & II HMIs

- Outright purchase
- Upgrade Trade Ins

Call or write **LTM** (818) 767-1313
11646 Pendleton Street
Sun Valley, CA 91352

NIL

EDGE CODING TAPE
WHITE - 400 FT
10 ROLL MINIMUM

\$3.50
per roll

LIMITED SPECIAL!

NEWSFILM LABORATORY, INC.
516 No. Larchmont Boulevard
Hollywood, CA 90004
(213) 462-6814

SHOOT IN SACRAMENTO!

Try Sacramento/Northern Calif. for your
next movie, commercial or video project.

FILM or VIDEO. Studio or Location.

Complete production services.

JWM PRODUCTIONS
(916) 457-3411

EQUIPMENT FOR SALE

CP-16RA camera w/Ang. 12-120 lens, mags, batts, chargers, case, fully re-built, \$3,500. Arri 16mm camera w/Ang. 12-120 lens, (3) 400' mags, variable speed motor (96 fps at 16.4 volts) 8.4 volt batt, handle & cases, \$3,500. Bolex SBM camera w/Berthiot 17.5-70 lens, matte box w/extended matte holders & glass matte, set of C mount extenders, cable release etc., \$1,750. O'Connor 30 fluid head w/claw ball base w/wooden tripod, \$1,050. Century 300mm lens w/Arri B mount, \$475. Arri SR sound barney, \$200. Ang. 5.9mm w/Arri B mount, \$1,250. Many other items available. Call Derrick at WHITEHOUSE A.V. (213) 479-8313.

35MM MOVIOLA Preview 35 picture, 16 sound, \$1,950. 16mm Moviola, \$875. NAGRA 4L recorder, \$3,275. IMAGE DEVICES, (305) 945-1111.

MOTION CONTROL SYSTEM, main camera track 26", Nodal point head. Pellicle Fries converted Mitchell w/video split. Model mover (inclg. 13 1/2" track, rotation, yaw). I.M.C. computer 12 channels. (Revision 2.0 software). **FRONT PROJECTION SYSTEM**, incorp. BNC Mitchell converted projector plus roll-up screen 30'x16'. Compatible w/Panavision & Arri 16mm or 35mm format. **BLUE SCREEN** 18' x 14', plus diffusing screen. 14x fluorescent tube panels as designed by Oxford Scientific Films. Portable system. Enquiries: **Australia**, call 011 612 888-9666, or FAX 011 612 888-3169.

NEED USED EQUIPMENT? WE'RE THE EXPERTS. PRO VIDEO & FILM EQUIPMENT GROUP. (214) 869-0011.

ARRI-S, 5 primes, zoom, mags, batt, case & more, \$2,500. **Eves, (609) 799-3377.**

CATALOGUE ON TECH'L & REFERENCE BOOKS: Cinema, acting, music, & writing. SEND \$1 (refundable). ELLIOTT KATT BOOK SELLER, 8568C Melrose, LA, CA. 90069 (213) 652-5178.

18 FT CAMERA CRANE for lease, \$875 per month, will deliver anywhere in the world. IMAGE DEVICES (305) 945-1111. FAX (305) 945-1117

BRENKERT special effects arc slide projector for stage & early movies. Circa 1913. Very rare. Hugh 16 Moviola. 8"x10" screen. A must for animators too. 980 ft Eastman lens. Will cover at least 5x7. C mount at present. \$300. 9.5x95 Ang. w/side finder. Neutral mount. Sharper than a 12x120. \$1,200. STUART JEWELL, 2040 Garden Ln., Costa Mesa, CA. 92627. Call (714) 548-7234.

USED EQUIPMENT. SATISFACTION GUARANTEED. FAIR PRICES. COMPETENT PEOPLE. PRO VIDEO & FILM EQUIPMENT GROUP, DALLAS. (214) 869-0011.

SINGLE FRAME/time-lapse/animation unit for Arri S or M. \$475 U.S. (403) 289-9892.

STEENBECK 8-PLATE, 16mm ST928. Excellent condition. Original owner. Extras: cut marking system, foot control. Call FURMAN FILMS (213) 306-2700.

THE LARGEST USED EQUIPMENT ORGANIZATION IN THE USA. THOUSANDS OF ITEMS IN OUR 10,000 SQ. FT. FACILITY. CALL US: (214) 869-0011.

16 Richter EMP UNDERWATER SYSTEM, brand new custom housing, w/5.9 Ang, EMP camera, mags, \$7,900. Want French Clair ACL. **IMAGE DEVICES, (305) 945-1111.**

SONY BVW-3 Betacam camera/recorder, w/Fuji 14x9 lens w/2X extender, Macro. Batts, AC supply, case. \$16,000. NELSON (213) 650-6670.

BELL & HOWELL 2709 camera, 35mm slide or motion, Schneider Componon 50mm lens, Prontor external shutter, stepping motor advance, 2-400' mags, 1-400' bi-pack mag, rackover w/through lens viewer. Camera mounted with 2-3 position filter wheels w/stepping motors, 1 Motorola MD1500 B&W video monitor for computer graphics. Apple II interface controls all, software included, \$6,500. TRANSFORMATIONS INC., 2 Custom House Wharf, Portland, ME 04101. (207) 774-1106.

EQUIPMENT FOR SALE

ANIMATION TABLE, X,Y & rotation, stepping motor drive, 800/1600 steps/inch, 60/120 steps/deg., 26"x20" motion. Apple II interface w/fourth axis & motor, was used to move camera. Software included, \$2,500. Andy Graham, IMAGE WORKS, (207) 774-2689.

16SR ARRI-TACH w/LED footage & speed readout. Two, excellent cond, \$850 ea. Call ECHOL MARSHALL (213) 225-5106.

WANTED

WE HAVE CASH customers: 9.8 Kinoptik Tegea, superspeeds for 35, Photo-Sonics 16 or 35, 16SR, 35BL1, 35BL2, 35BL3, 35BL4, Sachtler. IMAGE DEVICES (305) 945-1111. FAX (305) 945-1117.

WANTED; BL III 1000' MAGS. (801) 378-4182. Leon or Sharon.

WANTED: Heavy duty large base tilt plate, baby legs, & high hat. Contact: Richard Burton or Conrad Kiel at **PHOTO-SONICS RENTALS**, 820 So. Mariposa St., Burbank, CA. 91506 (213) 849-6251.

WANTED: Kodak Analyst Projectors 16mm silent. NATIONAL FILM CO. 10302 Kingspoint Houston 77075. (713) 944-5436.

WE WANT YOUR GOOD USED EQUIPMENT. CONSIGN, SELL OR TRADE. PRO VIDEO & FILM EQUIPMENT GROUP. (214) 869-0011.

WANTED: Arri BL-III, PL mount, Zeiss lenses, Sachtler tripod, KEM/Steenbeck, moviolas, 35mm dubbers & projectors, generator. **CONTINENTAL FILMS**, Park St, Sharon, PA 16146. (412) 981-FILM.

CINEMATOGRAPHERS: Major stock footage company is looking for beautiful images to represent. (213) 850-1996.

SURPLUS CAMERAS & LENSES WANTED: Send us your tired, your worn 16mm & 35mm Mitchells yearning to be turned into cash. We are also looking for good used 35mm Arri's & other fine cameras. We find buyers for surplus equipment. Contact JEFF at (818) 766-3715. **CENTURY PRECISION OPTICS**, 10713 Burbank Blvd, No. Hollywood, CA. 91601.

WANTED: CAMERAS—35mm & 16mm; sound equipment, fluid heads, editing, lighting, etc. Best cash prices paid. Consignment also available. Contact—Pete Anway or Matt Barr—**BIRNS AND SAWYER, INC.** 1026 N. Highland Ave, Hollywood, CA. 90038. (213) 466-8211.

TURN YOUR NON-PRODUCTIVE PRODUCTION GEAR INTO CASH. CALL THE EXPERTS. PRO VIDEO & FILM EQUIPMENT GROUP, DALLAS. (214) 869-0011.

WANTED: Mitchell 35mm high speed cameras & camera parts for models: GC, GCS, D, TA; & also, Cinerama HS35. Contact **FRIES ENGINEERING, INC.** 12302 Vose St, N. Hollywood, CA. 91605. Tel (818) 765-3600.

WANTED: Professional motion picture equipment, 16mm & 35mm, cameras, lenses, lights, sound, editing, projection, lab, for outright purchase or consignment. Supply complete technical description and price for immediate reply. Ted Lane, **ALAN GORDON ENTERPRISES, INC.**, 1430 N. Ca-huenga, Hollywood, CA. 90028. (213) 466-3561.

WANTED: STEADICAMS, CP-16R CAMERAS, ARRI SR, 35BLS, ARRI 11C & 111s, O'CONNOR, SACTHLER, MILLER FLUID HEADS AND TRIPODS, PRIME & ZOOM LENSES, NAGRA'S—FOR CASH, CONSIGNMENT OR TRADE. CALL DERRICK AT WHITEHOUSE A.V. (213) 479-8313.

WANTED: KEM RAPID 35MM, 6 plate. Call FURMAN FILMS (213) 306-2700.

SERVICES AVAILABLE

PHOTOGARD FILM PROTECTOR COATING SERVICE. Top quality application of 3M's unique film coating available for both 35mm & 16mm film prints w/ex-cellent service. **FILMACK STUDIOS** (312) 427-3395.

SENNHEISER
ELMO SONY
lowel AKG fostex
BOLEX UHER audio-technica
dbx JAC EDITORS
P.O. BOX 1291
MEADVILLE, PA 16335-0291

SERVICES AVAILABLE

TIMELAPSE, TIMELAPSE, TIMELAPSE, TIMELAPSE, TIMELAPSE, TIMELAPSE. Stock footage: nature, aerials, foreign, peoples, customs, rituals, landscapes. Rare, introspective descriptions for all scenes. 40 years. **EXPERIENCE, INSTEAD OF EXPERIMENTS.** STUART JEWELL, 2040 Garden Lane, Costa Mesa, CA. 92627. (714) 548-7234.

16MM SHOWCHRONS & 6 PLATE EDITING TABLES FOR RENT. (213) 664-6733.

PHILLIPS PRODUCTIONS: Assistance, consultation, location liaison, scout, stills, ideas, equipment. Low budget? **LET'S TRY!** (602) 266-2043, 24hrs.

DIRECTOR OF PHOTOGRAPHY W/PRODUCTION PACKAGE FOR HIRE, REASONABLE RATES. (213) 828-5063

QUALITY CAMERA SERVICE: Complete repair & machine shop, parts dept. & top experienced technicians are available at BIRNS & SAWYER, INC., to service your camera, lenses, tripods, & related equipment. Send in your equipment for an estimate to our Service Dept. CALL: (213) 466-8211, Peter Anway, BIRNS & SAWYER, INC., 1026 N. Highland Ave., Hollywood, CA. 90038.

OFF-LINE? Edit on VHS! \$80/day—\$320/week. (213) 739-4801.

ECLAIR-BOLEX-AATON FACTORY TRAINED SERVICE, USED EQUIPMENT & ACCESSORIES, AVAILABLE AT PROCAM, 10653 BURBANK BLVD, NO. HOLLYWOOD, CA. 91601. PHONE (818) 985-6325.

BATTERY REBUILDERS, all types. Film, video, photographic, strobe. CHAMBLESS CINE EQUIPMENT, 2488 Jewel, Atlanta, GA. 30344. (404) 767-5210. Free catalog.

MISCELLANEOUS

GET PAID for reading books! Write: Pase-AG3, 161 Lincolnway, North Aurora, IL 60542.

MOVING?

Please Notify Us
6 Weeks In Advance

Name

New Address

Apt.#

City

State

Zip

Mail to:

American

Cinematographer

P.O. Box 2230

Hollywood, CA 90078

ATTACH LABEL HERE for address change or inquiry. If you are receiving duplicate copies of AMERICAN CINEMATOGRAPHER, please send both labels. If moving, list NEW ADDRESS above.



Wide Screen Theatre Systems

1314 Ellsworth Industrial Dr. • Atlanta, Georgia 30318 • (404) 351-3618

☐ 48ft. MOBILE CINEMA, with 24ft. SCREEN ☐

HELICOPTER CINEMATOGRAPHY

☐ "TO FLY" and "FLYERS" in VISTASCOPE ☐

☐ VISTASCOPE 2 perf. PRODUCTION ☐

☐ .980 .367 ☐

EDITING—PROJECTORS

☐ ☐

SPECIAL OFFER WURKER S-8

**Würker S-8 Splicers \$50
Pkg. of 50 2F or 4F
Stereo Splices \$4**

Roller \$10, Sound Eraser \$8,
Liquid Sound Stripe \$6, Reg. 8
Splicer \$60, R8 Tape \$5.50,
Replacement Blades \$3
Send check/m.o. plus \$2.50 UPS

ALL SUPPLIES IN STOCK!

FILM-VIDEO SUPPLY CO.

P.O. Box 704, Orange, N.J. 07050

(201) 672-2223

**We pay UPS charges on
orders over \$75**

William Sound Service, Inc.
introduces

THE TRUE FRAME SYSTEMSM

The System that gives you the whole truth

The TRUE FRAME SYSTEMSM offers you the most technically advanced, expedient and cost-effective way to handle your film's post production.

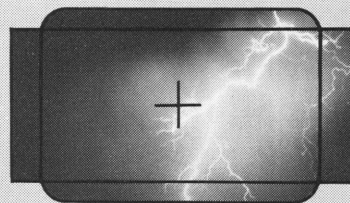
The TRUE FRAME SYSTEMSM transfers your camera original and 1/4" production soundtrack to 1/2" or 3/4" videotape complete with a time code window at 30 frames per second.

The TRUE FRAME SYSTEMSM is the only system that also gives you a separate window with your ORIGINAL KEY NUMBERS AT 24 FRAMES PER SECOND (16 frames per foot) all simultaneously programmed onto your 3/4" videotape. This gives your editor the security needed to edit comfortably with assurance of problem-free negative cutting.

WILLIAM SOUND SERVICE, INC.
(213) 461-5321

RON SAWADE
CINEMATOGRAPHY

STOCK FOOTAGE



THE NEW LIBRARY

CITIES
CLOUDS
SCENICS
SLOW-MOTION

EAGLES
SUNSETS
LIGHTNING
TIME LAPSE

818-769-1737



PORTABLE DOLLY

Clears 30" door
Adjustable camera
and seat columns
Only 40 pounds
5" rubber casters
or groove-track wheels
Fits 11"x15"x27" Case
(213) 454-7867

PETER GOWLAND

609 HIGHTREE AVE. SANTA MONICA CA 90402



EXPERT LENS SERVICE CALL CENTURY!

✓All Types Cine/Video ✓Fast Turnaround
✓40 Years Experience ✓Custom Work

Century Precision Optics

10713 Burbank Boulevard N. Hollywood, CA 91601
Ph: (818) 766-3715 FAX: (818) 505-9865

BOLEX ACCESSORIES

- 24-Frame Sync. Camera motor 115V
- Va. Speed Battery Camera motor 24V
- 400-ft. Magazine w/400' counter in camera
- Intervaltimer—Range 1 1/2 sec. to 36 min.
- Animation motor. Fits all H-16 models

(714) 650-7299

Write for Bolex Accessory Catalog

STEVENS

402 KINGS RD.

NEWPORT BEACH, CA 92663

16MM CINE EQUIPMENT

Specializing in Selected New and Used

BOLEX • B&H • BEAULIEU • CANON • KODAK

Cameras and Accessories

Write or Call for Complete Listing

CHAMBLESS CINE EQUIPMENT

2488 Jewel Street • Atlanta, GA 30344

404-767-5210

FOR SALE

LTM HMI LIGHTING

MK I & II SERIES

- Fully Reconditioned
- 1 Year Manufacturer's Warranty
- Excellent Prices

Call or write **LTM CORP. OF AMERICA**

(818) 767-1818

11646 Pendleton Street
Sun Valley, CA 91352

AMERICA'S PREMIER BOLEX DEALER ROLLS BACK PRICES



TEN-YEAR LOW

With factory cooperation, we are now able to sell Bolex factory-fresh cameras at the lowest prices in over ten years.

SPRING-DRIVEN OR ELECTRONIC



Call or write for current prices or complete catalog

CHAMBLESS PRODUCTIONS

2488 Jewel St. • Atlanta, GA 30344
404-767-5210

BEAUTIFUL FILM FOR SALE

Now you can create beautiful motion picture sequences from film that has won awards throughout the world. Available for purchase for your film or television commercial is footage from the library of MacGillivray Freeman Films, the photographers of "Five Summer Stores," "Jonathan Livingston Seagull," "Skyriders," "Big Wednesday," and the American sceneries in Stanley Kubrick's new film, "The Shining." Our special categories of incredible film images include:

AERIAL SCENES	AIRPLANES	SURFING	WAVES
CITIES BY AIR	BALLOONS	SAILING	OCEAN
CLOUDS & SUNSETS	SEAGULLS	CLIMBING	SKIING
NATIONAL PARKS	HANG GLIDING	SOARING	& MORE

Write or call us for additional information and our color poster catalogue:
MACGILLIVRAY-FREEMAN FILMS
Producers of fine Feature Films, Television Commercials, and Corporate Image Films
Box 205, South Laguna, CA 92677 (714) 494-1055

TEXCAM INC.

Covers the state with offices in Dallas and Houston. TEXCAM can quickly respond to your needs with the latest in Arri 35 BL-4 • Zeiss Primes • Arri 35-3 • Cooke Zooms • Sachtler • Tiffen • Arri SR11 • Micro Force • Tyler • Mitchell • Canon • Cinematography Electronics • CEI • Jurgen's • G&M Power Products • Harrison & Harrison • O'Connor • Angenieux • Worrall • Arri BL-3 • Ronford • II-C PL • Century Rental and Sales

TEXCAM INC.
3263 Branard
Houston, TX 77098
713-524-2774

TEXCAM, INC.
3226 Irving Blvd.
Dallas, TX 75247
214-630-1487

LARRY EDMUNDS BOOKSHOP, INC.

"World's Largest Collection of Books on the Cinema & Theatre"

NEW AND OUT-OF-PRINT

MEMORABILIA-POSTERS-STILLS

World-Wide Phone & Mail Orders
VISA/MASTERCARD BOOK LIST AVAILABLE

6658 Hollywood Boulevard, Hollywood CA 90028
Phone (213) 463-3273

Also at the 'Actors Center'
11969 Ventura Boulevard, Studio City CA 91604
Phone (818) 508-7511

WE BUY Film Stock Video Cassettes

TOP CASH

PLUS 50% OF SHIPPING

RAFIK (212) 475-7884
814 BROADWAY NEW YORK NY 10003

MOTION MEDIA

16mm Magnetic Film Transfers

Sync, Wild, 1/4", or cassette . . . \$16 - hr
Mag Film Stock \$.04 - ft

Fast Service by Mail

Write or call;

203 W HOLLY • SUITE M15 • BELLINGHAM WA 98225
(206) 676-2528

DON'T LOSE YOUR HEAD!

We will renew your Fluid Head and overhaul it completely to be BETTER THAN NEW!
Write or call us for our super fast service and low prices.

2025 N.E. 151st St.
No. Miami Beach, FL 33162
(305) 949-9084, 9085

NCEO
OF FLORIDA, INC.

Don't shoot your budget... SHOOT IN MEXICO!

All the information you'll need to film in Mexico!
684-08-69 (Direct) Mexico City
533-47-34 (Night) Mexico City
684-08-69 (FAX) Mexico City
713-668-2717 (U.S.)

CINE SOUTH de Mexico
Contact: MARK PITTMAN

16mm Super—8

Color Reversal Processing

VNF-ME4-ECO

B/W Reversal Processing

Same Day Service

Duplicate Prints

Video Transfer

Write or Call for Price List

YALE LABORATORY

1509 N. Gordon Street
Hollywood, CA 90028
(213) 464-6181

DAN MERKEL MEANS ACTION Water Photography

STOCK FOOTAGE LIBRARY

SURFING
SAILBOARDING
OCEAN WAVES
AND MORE!



(805) 648-6448 / Local 659
Box 722, Carpinteria, CA 93013

SALES SERVICE RENTAL

New & Used Film & Video Equipment

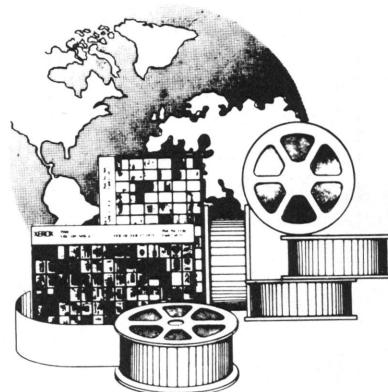
Dealers for:

■ Cinema Products ■ Century Precision
■ Miller ■ Comprehensive ■ Lowell
■ O'Connor ■ The Film Group & more.

WHITEHOUSE AUDIO VISUAL

11511 West Pico Boulevard
Los Angeles, CA 90064 (213) 479-8313

This Publication....



is Available in MICROFORM

For Complete Information

WRITE :

**University
Microfilms
International**

Dept. F.A.
300 North Zeeb Road
Ann Arbor, MI 48106
U.S.A.

Dept. F.A.
18 Bedford Row
London, WC1R 4EJ
England

EQUIPMENT Leasing

Leases from 5k, with 2-5 year terms for qualified end users. Film, studio and video my specialty. Les Sechler-Enterprise Leasing

(213) 872-1433 • (818) 986-1545

PHENOMENAL FOOTAGE.

It's just a phone call away. Footage from silent films, feature films, newsreels, documentaries, industrial films and more. Fully cleared for use in your productions.

Our computerized system assures fast access. Call or write for a free brochure and sample reel.

Archive Film
Productions, Inc.
Stock Footage Library

212/620-3955

Dept. AC, 530 West 25th Street New York, NY 10001
FAX 212/645-2137 Telex 822023

BABYLON POST

Telecine • Dailies
35/16mm Edge Numbering



213-460-4088

901 North Seward Street, Hollywood, CA 90038

CANADA'S LARGEST LAB AND SOUND FULL SERVICE ORGANIZATION



BELLEVUE Pathe

MONTREAL
2000 Northcliffe Ave.
Montreal Que. H4A 3K5
Tel 514-484-1186

TORONTO
720 King St. West
Toronto Ont M5V 2T3
Tel 416-364-3894

Pathe Sound Studios
121 St. Patrick St.
Toronto Ont M5T 1V3
Tel 416-598-2521

*A DIVISION OF ASTRAL BELLEVUE PATHE LTD /LTEE

CINE SOUND 5 SOUND PRODUCTION EQUIPMENT SALES • SERVICE • RENTAL

Dealers for:

MICROPHONES: AKG, Neumann, Schoeps, Shure, Sony, Tram, Sennheiser, Beyer • WIRELESS: Micron, Vega, Sony, Audio Ltd. • MIXERS: Sony, Shure, 6 Input Mono By AVD • RECORDERS: Used Nagras, TC-DSM, WM-D6, PMD-430, UHER, By Film Group • MIC. POLES: LTM, LWS, Micron • Video Transmitters • Power Supplies • Electronic Slates • Beyer Head Sets • Windscreens, Shock Mounts By LWS • Kangaroo Cases
King Walkie-Talkies • Etc.

We also Buy, Trade and Sell Used Nagra, Vega Micron, Sennheiser, etc.
We Rent New Motorola Walkie Talkies

SAVE MONEY.....BUY FROM US
3815½ W. Burbank Boulevard
Burbank, CA 91505
(818) 845-6496 — (818) 348-9403

SUPER BALTAR LENSES

We have the only remaining inventory of BRAND NEW Super Baltars, from 20mm to 152mm in the world today! Write us or call for prices.

2025 N.E. 151st St.
No. Miami Beach, FL 33162
(305) 949-9084, 9085

NCE
OF FLORIDA, INC.

Advertiser Index

AGFA-Gevaert: 41
Alan Gordon: 68, 90
Anderson: 26
Apogee: 53
Archive Film: 99
Arriflex: 19
Arrow Cinema: 86
Atlas Corp: 90

Babylon Post: 99
Bellevue Pathe: 99
Birns & Sawyer: 23, 91
Black & Hispanic: 14

Calgary Economic: 85
Camera Platform: 67
Carpenter Sales: 96
Century Precision: 93, 97
Chambless Productions: 97, 98
Chapman Studio Equip.: 91
Cine 60: 82
Cine Sound 5: 99
Cine South: 98
Cine Video: 81
Cinema Electronics: 68
Cinema Products: C-2
Cinematography Electronics: 26

Cinequipt: 92
Clairmont: 8, 9
Columbia College: 94
Computer Optic: 77
Cool Light: 24
Crown Intl.: 88
CTM: 27

Denecke: 92
Dittrich, S.: 95
Dreamlight: 96
Du Art: 13

Energy Productions: 95
Enterprise: 99

FGV Panther: 16, 17
Film Search: 84
Flying Tiger/Colt: 14
Foto-Kem: C-3
Fries: 88

G & M Power: 76
General Camera: 1
General Electric: 42, 43
Geocam: 97
Gowland, Peter: 97

Great American Market: 7, 22
GTE Sylvania: 25

Harrison: 87
Helix: 20

I See You: 55
Image Device: 10

J.W.M. Productions: 96

K & H Products: 70
KEM Elektronik: 62, 63
Knox, David: 4

Larry Edmunds: 98
Lee Filters: 11
Light-Wave: 6
London Intl.: 86
Lowel Light: 2
LTM Corp.: 5, 96, 97

Macgillivray-Freeman: 98
Marc Wyler: 84
Matthews: 77
Merkel, Daniel: 98
Mole-Richardson: 84

Motion Media: 98

Nagra USA: 21
National Geographic: 93
NCE of Fla: 98, 99
Nevada: 4
Newsfilm Lab: 96
Norris Film: 92

O'Connor: 52
Ocean Images: 68
Oppenheimer: 95
Optical Textile: 15, 68

Panavision: 28, 29
P.E.D. Denz: 60, 61
Pacific Title: 54
Prod. Atlanta: 33

Radian Group: 86
Rafik: 98
Rank Taylor: 57
Renta Imagen: 87
Robinson, Peter: 82
Roessel CPT: 85
Ron Sawade: 97
Rosco: 92
Rusty Geller: 10

Schmitzer: 91
SMS Productions: 82
Steadicam: 24
Stevens Engineering: 97
Super 8 Sound: 71
Super Edit: 91

Technologica: 83
Texcam: 98
Tiedemann, Richard: 67
Toronto: 75

Ulland: C-4
Unilux: 6
Utterbach: 52

Video Service: 93
Vistascope: 97
Visual Departures: 76

Walt Disney: 69
Whitehouse Audio-Visual: 98
William Sound: 97
Wisconsin: 83

Yale Lab: 98

ZGC: 95

In Memoriam

Milton Krasner, ASC, an outstanding pioneer cinematographer, died of heart arrest July 16 at the Motion Picture Hospital in Woodland Hills. He was 84. A son, a granddaughter, and two brothers survive him. Krasner's career in motion pictures spans 14 years as an assistant cameraman and operator, 170 theatrical features as a director of photography and five years of cinematography of a television series.

The range of his work covers every kind of film from Poverty Row "quickies" to the most opulent extravaganzas; from the primitive silent films of 1919 through such technological wonders of industry progress as Technicolor, CinemaScope, wide film and three-camera Cinerama. His artistry is as evident in the ten-day B pictures to which he was often assigned, and for which he retained a strong affection, as in the expensive, long-schedule pictures that eventually dominated his career.

Krasner was born February 17, 1904, in Philadelphia and got his start in the laboratory of the old Vitagraph Studios in Brooklyn when he was 15. He came to Hollywood as an assistant cameraman in 1925. "I learned from a lot of 'em" he said recently about what he called 'my learning years.' "I even worked for Billy Bitzer, and he was a character! Sol Polito taught me everything about lighting walls and other big surfaces. I learned about filters from Ted McCord on the Ken Maynard pictures at First National and Universal. Of all the cameramen I worked with, Hal Mohr was my favorite. We had a swell team – I was the operator and Stanley Cortez and Bob Surtees were the assistants." He became an operator at Columbia in 1930 on a Frank Capra production, *Rain or Shine*, and was named a director of photography at Paramount in 1933 on *Strictly Personal*.

After photographing eight features for Paramount, he made several for MGM, Monogram, Republic, and others. In

1935 he made *The Great Impersonation* at Universal, where he remained to work on from six to 12 pictures a year for the next eight years, plus occasional loan-outs. Among them were *Yellowstone*, *Mysterious*



Crossing, *The Missing Guest*, *The Storm*, *The House of Fear*, *You Can't Cheat an Honest Man*, *The Bank Dick*, *The House of the Seven Gables*, *The Invisible Man Returns*, *This Woman is Mine*, *Paris Calling*, *Arabian Nights* (his first Technicolor production), *Ghost of Frankenstein*, *Buck Privates*, *Gung Ho!*, *Men of Texas*, *The Spoilers*, and *The Invisible Man's Revenge*. Krasner also did some of the special effects of the latter picture when John Fulton left the studio after a dispute with management. It was his last contract film for the studio, although he returned often during the ensuing five years of freelancing.

Among the memorable pictures of this period were *Woman in the Window* and *Scarlet Street*, both directed by Fritz Lang, *Along Came Jones*, *The Dark Mirror*,

The Farmer's Daughter, *The Accused*, *A Double Life*, and *The Set Up*. In 1949 he began a long association with Twentieth Century-Fox. *All About Eve*, *Rawhide*, *Phone Call From a Stranger*, *Demetrius and the Gladiators*, *Desiree*, *Three Coins in the Fountain*, *Garden of Evil*, *The Rains of Ranchipur*, *The Seven Year Itch*, *Bus Stop*, *23 Paces to Baker Street* and *Boy on a Dolphin* were among the more notable of his pictures at Fox.

During the 1960s he also made a large number of pictures at MGM, Paramount and Universal. These included *King of Kings*, *How the West Was Won* (in three-camera Cinerama), *The Sandpiper*, *The Singing Nun*, *Hurry Sundown*, and *The Sterile Cuckoo*. After *Beneath the Planet of the Apes* in 1970 he left Fox. The following year he returned to Universal, where he photographed the *MacMillan and Wife* series of two-hour mysteries until his retirement in 1975.

Krasner was nominated for Academy Awards for *Arabian Nights*, *An Affair to Remember*, *All About Eve*, *Fate is the Hunter*, *Love With the Proper Stranger* and *How the West Was Won*. He won an Oscar in 1955 for *Three Coins in the Fountain*.

He was a master of in-camera effects. He did a good many with optical glass in *Ghost of Frankenstein* in 1942. The work he did in black and white remains as a tribute to his genius with light and shadow, but the transition to color was no less beautiful. "A picture that amazed me with its color was *A Star Is Born* in 1937," he said. "The scenes of the train going by when Janet Gaynor is standing at the station, and the light coming in through the window at the station – I'd always think of those when I was lighting with color, asking myself, how can I get that kind of effect? We learn from our peers. I'm talking about the Tony Gaudios, the Hal Mohrs, the Ernie Hallers and the Sol Politos." △

HERE, YOU'RE TOP BANANA



When you come to us with your film and video projects, we like to show our appreciation. At other places, the big budget folks get all the attention. But here at Foto-Kem/Foto-Tronics, we treat you like the Top Banana.

As our client, you deserve special treatment. Whether you do one project a

year, or many, you get the personal service you expect. Even when every penny counts, you'll get the quality you're after.

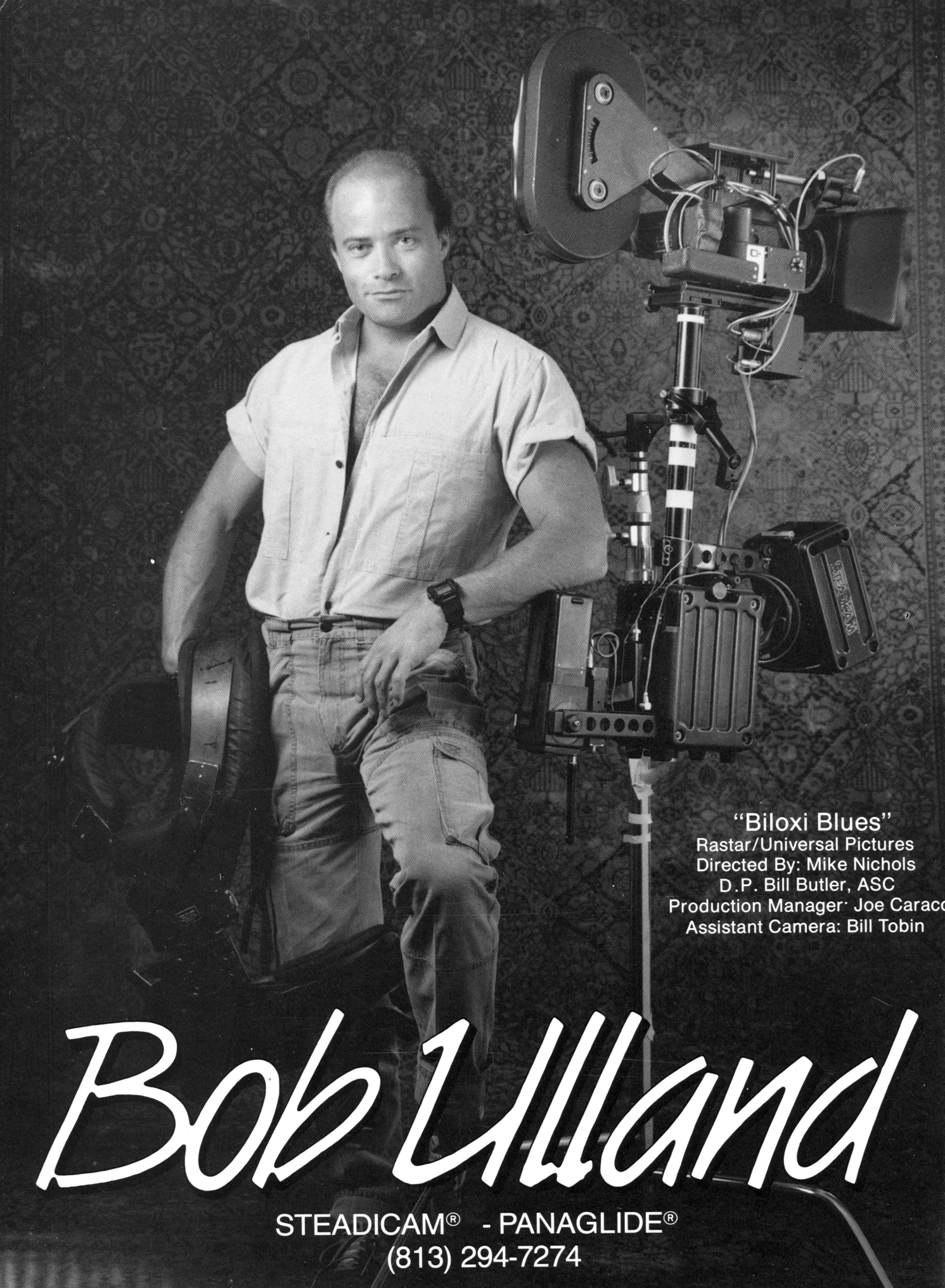
We become part of your creative team, so the creative process does not end on the set. Like you, we are professionals, dedicated to making your creative project bear fruit. The time is ripe. Call.



FOTO-KEM
FOTO-TRONICS

MOTION PICTURE LABORATORY ☐ **VIDEOTAPE POST-PRODUCTION FACILITY**

2800 West Olive Avenue, Burbank, California 91505 ☐ Telephone 818/846-3101



"Biloxi Blues"

Rastar/Universal Pictures

Directed By: Mike Nichols

D.P. Bill Butler, ASC

Production Manager: Joe Caracciolo

Assistant Camera: Bill Tobin

Bob Lillard

STEADICAM® - PANAGLIDE®

(813) 294-7274